CONTENTS

VOL. III JANUARY, 1934 No. 2

Irving Babbitt — PAUL ELMER MORE — 129

Physical Science Ancient and Modern — FRANK ALLEN — 146

Personality, Property, and Communism — JACQUES MARITAIN — 167

Heine's Vaudeville — BARKER FAIRLEY — 185

The Montaigne Quater-Centenary — HERBERT L. STEWART — 208

The Wheat Problem — D. A. MACGIBBON — 228

Reviews

More War Memories — ALFRED ZIMMERN — 245

The Dean and the Astronomers — G. S. BRETT — 251

The Art of the Novel — JOSEPH WARREN BEACH — 257

CONTRIBUTORS TO THIS ISSUE

FRANK ALLEN, Professor and Head of the Department of Physics in the University of Manitoba, has written a general exposition of relativity (*The Universe*, 1931) and is engaged in studies in the measurement of sensation.

JOSEPH WARREN BEACH, Professor of English in the University of Minnesota, is the author of several works on fiction, among which are *The Twentieth Century Novel* (1932) and books on Meredith, Hardy, and James.

G. S. BRETT, Professor and Head of the Department of Philosophy in the University of Toronto and Dean of the School of Graduate Studies, was formerly Editor-in-Chief of the QUARTERLY.

BARKER FAIRLEY was Professor of German in University College, Toronto, until his recent appointment to the Simon chair of German in the University of Manchester. He is the author of the centenary study, *Goethe as Revealed in his Poetry*.

D. A. MACGIBBON, one of the Grain Commissioners for Canada, has written the authoritative work *The Canadian Grain Trade* (1932).

JACQUES MARITAIN, Professor of Philosophy at the Institut Catholique in Paris and Visiting Professor at the Institute of Mediaeval Studies of St. Michael's College, Toronto, is one of the masters of contemporary Catholic thought.

PAUL ELMER MORE, sometime Editor of the *Nation* (New York), is the author of the celebrated *Shelburne Essays* and of *The Greek Tradition*.

HERBERT L. STEWART is Professor of Philosophy in Dalhousie University and Editor-in-Chief of the *Dalhousie Review*. His most recent book is *A Century of Anglo-Catholicism* (1932).

ALFRED ZIMMERN, Professor of International Relations in the University of Oxford and Director of the Geneva School of International Studies, is the author of *The Greek City State*.

IRVING BABBITT*

PAUL ELMER MORE

IT is not an easy thing, with the cold page of print in mind, to write of a friend, a very close friend, and it is only with reluctance that I have acceded to the request to undertake such a task. And there was a special reason for hesitating in this case. Babbitt was an author and a teacher, and in these capacities is known to a larger and a smaller circle; others may estimate—indeed Professor Mercier has already estimated—the value of his books as well as I could do, or better, and of his astonishing manner and power in the lecture room, his pupils, many of them now holding prominent places in the academic world, can speak from a knowledge which I do not possess. But he was a talker too, greater in that vein, I believe, than as a teacher, greater, I know, than as an author. And it is just of his genius in the give and take of conversation that I am qualified, by long association and by a fundamental sympathy of mind not incompatible with clashing differences, to write as probably no one else can do. Yet a record of the spoken word without its intonation and the accompanying gesture leaves it but a dead thing, and a reported argument is likely to lose its point unless the second party to the discussion brings himself into the scene to a degree that may seem egotistic.

My acquaintance with Babbitt began in the autumn of 1892, when I came to Cambridge from the West to

*Irving Babbitt, Professor of French Literature at Harvard, was, with the author of this article, the founder of the modern humanist movement in America, and until his death last year, its chief leader. His works include *The Masters of Modern French Criticism*, *Rousseau and Romanticism*, and *Democracy and Leadership*. In 1930 he gave the Alexander lectures in the University of Toronto, on "Wordsworth and Modern Poetry" (printed in his last work, *On Being Creative*) [EDITORS' NOTE].

prosecute my study of Sanskrit and Pâli. Babbitt was then twenty-six or seven years old. He had graduated from Harvard, had taught for a time in Montana, and had then spent a year in Paris working in the same languages with Sylvain Lévi. We two formed the whole of the advanced class under Professor Lanman, and naturally were thrown much together. I can well remember our first meeting in Lanman's marvellously equipped library. Babbitt was rather above the average height, powerfully built, with the complexion of radiant health. But it was his eyes that caught and held one's attention. They were of a dark, not pure blue, and even then, though of a lustre that dimmed somewhat in later years, had in repose the withdrawn look of one much given to meditation. He had a way of gazing downwards or forwards or anywhere rather than into the face of his interlocutor, in a manner which could never be described as timid or shifty, but which gave often the impression of remoteness, as if the individual before him were lost in some general view of life or some question of fundamental principles which might be occupying his mind. But if the unlucky individual thought to escape into that remoteness from the consequences of a rash statement or logical fallacy, he was likely to be caught up by a swift direct glance that seemed to shoot out tentacles, as it were, into his very soul. At such moments that restless energy of Babbitt's, which was wont to work itself off in walking or by pacing back and forth as he talked, would appear to be gathered together, holding his body in an attitude of tense rigidity. The effect—I am speaking of his early years of combat—was startling, sometimes almost terrific, as if in an evening ramble under the shadow of familiar trees one were brought up sharply by the gleam of watching eyes from a form crouching ready to spring. One such instance I

may recall. We were strolling up what was then known as North Avenue, engaged in debate over I cannot remember what matter, when suddenly he stopped short, faced about upon me, and, with both hands rigidly clenched, ejaculated: "Good God, man, are you a Jesuit in disguise?" The words may sound flat enough in the repeating; but as they were hurled out, with the accompanying gesture and glance of indignation, they made an impression not to be forgotten. I have never been able to answer the question satisfactorily.

The old North Avenue and Brattle Street, both thoroughfares at that time leading out into the open country, are particularly associated in my memory with these talks. Babbitt was always delicately sensitive to the charms of New England scenery, and in such places as Squam Lake and Dublin, N.H., where later I visited him in the long vacations, he would manifest a romantic love of nature which might surprise those who know only the classical and rather austere side of his intellect. But again, in those Cambridge days, owing to the weather or the hour we would meet indoors, sometimes in his room, oftener in my own narrow quarters. And I can see, almost hear, him now as he used to pace back and forth the few steps from wall to wall, arguing vehemently on whatever question might be broached, or recounting the adventures of his youth (a strange and mixed experience), pausing at every fourth or fifth turn to take huge draughts from the water jug on my washstand, and pretty well emptying it in the course of an evening. I cannot recall the range of topics discussed—no doubt in part they were those which young men have been worrying over since the beginning of human speech—nor can I recapture the excitement of hearing the world and the destinies of man tossed about in thesis and counter-thesis after a fashion

quite new to me. Literature was one of the fields in which he exercised his dialectic, naturally; and what remains with me now is chiefly the fact that his views were already formed and fixed. My taste, on the contrary, was in a state of transition. I had brought with me to Cambridge a mind steeped in Heine and Novalis and the Schlegels, and though my enthusiasm for these German dreamers had cooled before I met him and I was feeling my way towards more classical standards, there was enough of the old virus left in me to call out all the vigour of his critical powers. I am afraid that I held for him then the place afterwards occupied by Rousseau, who in those days, so far as I can remember, was never mentioned, but first comes to the front in the comparison with Bacon in *Literature and the American College*, one of Babbitt's best and most finished pieces of writing and an epitome of all he was to fight for in later years. Of the classics Horace, I think, was at that time the poet most frequently referred to or quoted by him. And at the frosty touch of that Lord of Common Sense the exquisites of romanticism would shrivel up and drift away in the winds. How he came to his love and mastery of Roman and Greek poets, I do not know. According to his own account, the taste was born in him. The astonishing fact, as I look back over the years, is that he seems to have sprung up, like Minerva, fully grown and fully armed. No doubt he made vast additions to his knowledge and acquired by practice a deadly dexterity in wielding it, but there is something almost appalling in the immobility of his central ideas. He has been criticized for this and ridiculed for harping everlastingly on the same thoughts, as if he lacked the faculty of assimilation and growth. On the contrary, I am inclined to believe that the weight of his influence can be attributed in large measure to just

this tenacity of mind. In a world visibly shifting from opinion to opinion and, as it were, rocking on its foundation, here was one who never changed or faltered in his grasp of principles, whose latest word can be set beside his earliest with no apology for inconsistency, who could always be depended on. It will be remembered that Socrates was charged with the same monotony of ideas, and his retort to the sophist might have been uttered by Babbitt: Why, my dear young man, not only am I always talking in the same manner, but I am forever talking about the same things. It comes down to one's conception of truth: is truth something fixed which can be discovered, and when discovered is it of a nature to demand a man's unwavering allegiance; or is truth too, like opinion, only a glimpse of some momentary aspect of the flux, no sooner beheld than lost in the flowing stream of impressions?

And not only had Babbitt at an early age—how early I do not know—reached these settled convictions, but at least from the beginning of our acquaintance they were knit together into a system by logical bonds which were perfectly clear to his mind, so clear, indeed, that he tended to take them for granted as equally obvious to others. The consequence to his writing was not wholly fortunate. For one thing, it gave a kind of rotary movement instead of a regular progression to his books. A rhetorician would say that he did not know how to manage his paragraphs. Instead of finishing one link of his argument and then proceeding to the next and so on from premiss to conclusion, he is somewhat inclined to crowd his whole thesis, at least implicitly, into each single paragraph, so that the book, despite the inexhaustible variety of his illustrations, gives the impression of endless repetition. That is undoubtedly a fault of construction, and has stood

in the way of his full recognition as a thinker. But it is a rhetorical fault only, owing to a failure to put himself as a writer into the mind of his reader; the constructive faculty was really there; he had reasoned out his position step by step, but, having done this for himself, he would forget that his reader had not been present at the process, and he would pitch into his exposition at any point—beginning, middle, or ending.

And this is one reason why he seemed to me more effective as a talker than as a writer. Here again the uninstructed or uninterested listener might criticize his conversation as displaying the same lack of method as his books. And I can remember the complaint of a distinguished but rather commonplace historian of Harvard that my friend's conversation had no sense at all, being a jumble of terms with no definite meaning for him or for anyone else, and of dogmatic assertions which severally had no logical basis and collectively no sequence. But for the sympathetic listener there needed to be no such difficulty. By a question interposed here and there, or by an occasional sharp contradiction, it was easy to bring him back to the order of his thoughts and to lay bare the whole inner working of his mind from axiomatic principles to inevitable conclusions.

I am trying to describe Babbitt's talk at its highest, when the subject brought out all his resources, and to show how, in the give and take of argument and by the need of defending his position against an antagonism not incompatible with large agreement, certain qualities came to the light which many readers fail to detect in his published works. But I would not leave the impression that he was addicted to preaching in season or out of season; there might be something of the prophet in his tone when grave moral issues were raised, never of the

prig; he might reduce his antagonist physically to a rag by the pertinacity of his attack, he was never a bore. His ordinary intercourse, as a matter of fact, was notable for flashes of wit and strokes of keen repartee that could set the table on a roar, and in his earlier days might be seasoned by touches of almost Rabelaisian humour which would never be guessed from the reticences of his later manner.

Literature and life were much in his thought; but the staple of his more serious talk, owing chiefly to his own inclination but partly, no doubt, to provocation from my side, was ethical and religious. This remained true to the end; in those days, however, the discussions were coloured by his, or I may say our, special studies. From the beginning, Babbitt was drawn to the Buddhistic side of Hinduism rather than to the Brahmanic, and to the Pâli language, in which the most authentic record of Buddha's teaching is preserved, rather than to the Sanskrit. There was something in this corresponding to his classical taste in works of the imagination and to his rejection of romanticism. Primarily what attracted him to the Pâli texts may have been the clarity and concreteness of the style (which the uninitiated may best feel in De Lorenzo's Italian version of *I Discorsi di Buddho*), as compared with the elusive mistiness of the Sanskrit, particularly of the *Upanishads*. With this clarity, almost hardness, of expression went the ethical doctrine of Buddha. Here I am unable to say whether Babbitt favoured the doctrine, the *dhamma*, because it fell in with conclusions at which he had already arrived by independent reflection, or whether his ethical ideas were largely the result of reading in the Pâli. Of the two alternatives I guess that the former is the truer, though in either case the important point is the native affinity of his mind with that of the

Oriental sage. This comes out in a footnote to his criticism of the Arcadian dream of Rousseau in his first publication:

> The greatest of vices according to Buddha is the lazy yielding to the impulses of temperament (*pamâda*); the greatest virtue (*appamâda*) is the opposite of this, the awakening from the sloth and lethargy of the senses, the constant exercise of the active will. The last words of the dying Buddha to his disciples was an exhortation to practise this virtue unremittingly.

That was the lesson Babbitt had for the world when I first knew him; it is the heart and essence of what he inculcated in book after book, to the discomfiture and disgust of his hostile critics; it is what he was hoping to confirm by a translation and exposition of the *Dhammapada* which he was preparing when his health failed.

On the other hand, I had started my Oriental studies with a predilection for the Sanskrit literature of the *Upanishads*, the *Bhagavad Gîta*, and the Vedantic theosophy. To this I was brought in part, I suppose, by the romantic virus not yet expelled from my system, though a deeper attraction was in the mythological elements of the Vedânta, which, in fact, range from an absolute pantheism to a grotesque polytheism, but which might lead, as I think I even then felt instinctively, to a more concrete monotheism. However that may be, it is easy to see that here was a situation to call out all Babbitt's fighting powers in debate; and nobly did he respond to the summons. I would never acknowledge defeat, but I was often left prostrate on the field of battle.

This Harvard period extended over three years, the first when we were students together, the second when he returned as instructor in French after an interval of a year at Williams, and the third in 1899-1900 when I was

there again doing some special work for Lanman. It is a digression but a fact worthy of note that, though Babbitt began—and ended—his teaching career at Harvard in the modern field, his heart at first was set on working in the classics. I often wonder what might have been the consequences if the Classical Department had not rejected him at the beginning and continued systematically *more suo* to ignore him. What might have happened if he had spent his energies on expounding a literature to which he could have given his positive allegiance instead of one which he studied chiefly to annihilate? His diagnosis of our modern ailments would have lost something of its fervour and scientific completeness; but the exemplary wisdom of Greece might have been brought back to us alive, and the teaching of the classics might have been made once more a discipline in the humanities. I may be pardoned for adding here my complaint that a very great teacher, perhaps even the greatest this country has ever produced, was overlooked by one department and, where accepted, had to force his way up against resistance and through protracted depreciation. There was a moment in his mid-career when it was even touch and go whether he would not be dropped altogether. It was the response to his genius by a large and growing number of the better students in the University that ultimately brought full recognition from the Faculty. But this is a digression.

A long period elapsed before the discussions of that early association were renewed in all their intimacy and intensity. During this interval I had visited him more than once in his summer homes and he had passed a number of months in Princeton, but the real fun began again in the second term of the academic year 1925-6 (if my dates are correct), when I was a substitute at

Harvard for an absent member of the Classical Department. Fortunately I was able to rent the home of Professor Ropes, who also was enjoying a "sabbatical." There was a large and comfortably furnished library attached to the house, and here night after night, two or three times a week, Babbitt used to come, and, sitting on one side of the great fire-place, with me—shall I say, his glad victim?—on the other side, poured out such a stream of argument, invective, and persuasion as had not, I am sure, been heard in Cambridge before and probably will never be heard again. It was *magnifique, et c'était la guerre!* The battle-ground was the same as in the old Harvard days, but with a difference. Babbitt's fundamental ideas had not changed by a jot, though they were now reinforced by an appalling mass of erudition at the service of an unhesitating, unfailing, unerring memory. Meanwhile, I had quite definitely moved away from my absorption in the theosophical speculations of India; my heart was now all in a Platonism supplemented by Christian theology of the Greek type. Against the Platonic philosophy of Ideas, Babbitt brought up Aristotle's positive and scientific humanism, and with the claims of theology contrasted the merits of Buddha's non-theological religion which offered the same ethical and spiritual results as Christianity without demanding credence in a dogma and a mythology impossible, he insisted, for the modern mind to accept. Of course my cue was to contend that Aristotle himself, seeing that his positive humanism could not stand on its own feet, was driven at the last to brace it with a metaphysic of the Absolute beside which Plato's Idealism is as easy to swallow as a breath of spring air, and that in religion Buddha had won his army of adherents by the example of his own supposed ascent through countless aeons to

absolute knowledge, a myth as difficult to credit as the Incarnation. Naturally I thought at the time I was right, as I still think; but if victory ever lodged on my side, it was of a very private sort, known only to myself when I had crept to bed. But oh the wonder and glitter of those defeats!

It will be seen how Babbitt's attitude towards the great religions of the world might be brought out in such debates with a sharpness that would scarcely be guessed by those who know him only in his books. And this is particularly true in the case of Christianity, where for a double reason he exercised a certain reserve, or "economy," in his public statements. For one thing, he wrote always not for display but for conviction. His mind was eminently practical in that he aimed at getting results and thought much of strategy in attack. He held it a law of sound tactics not to arouse the hostility of those whom he desired to convince, but to make concessions where this could be done with honour; and he used to scold me laughingly, sometimes almost pathetically, for going out of my way, as he said, to make enemies among every party to a controversy. Thus it was that he took pains in his writing to avoid irritating the sensibility of Christian readers. But besides the strategic motive, perhaps explaining it, was the fact that he recognized in what he would call the psychological effects of dogmatic faith a moral and spiritual discipline to be acclaimed and fostered, whatever its source might be. He saw, and admitted whole-heartedly, that belief in the Grace of God operated to awaken the soul "from the sloth and lethargy of the senses," and to produce a "constant exercise of the active will" profoundly akin to the *appamâda* of Buddhism. In all this there was not the slightest intention to deceive or to palter about first principles; but it happened,

nevertheless, that many Christians were misled by these concessions. The dogma of Grace, the notion of help and strength poured into the soul from a superhuman source, was in itself repugnant to him, and the church as an institution he held personally in deep distaste, however he may have seemed to make an exception of the disciplinary authority of Romanism. There should be no misunderstanding left on this point. The naked truth will, I believe, redound to his credit; it will clarify and strengthen his influence with the large body of his pupils who feel the need of religion but cannot subscribe to a definite creed. I can remember him in the early days stopping before a church in North Avenue, and, with a gesture of bitter contempt, exclaiming: "There is the enemy! there is the thing I hate!" Undoubtedly that sentiment was softened as time went on, and as he grew more charitably disposed towards those who, for whatever reason, were ranged on the side of decency and restraint; but it never disappeared. On the other hand, he was much closer to Buddhism than would appear from his public utterances. I wish not to exaggerate. In private as well as in public he refused to be denominated a Buddhist, and with perfect sincerity. But in the denial by Buddha (the real Buddha as seen in the authentic texts) of anything corresponding to Grace, in his insistence on the complete moral responsibility of the individual, in the majesty of his dying command, "Work out your own salvation with diligence," Babbitt perceived the quintessential virtue of religion, purged of ephemeral associations, of outworn superstition, of impossible dogma, of obscurantist faith, and based on a positive law which can be verified by experiment, pragmatically, step by step. It was in this way he sought to bring together a positivism in the religious plane with

a positivism in what he distinguished as the purely humanistic plane of life and letters.

So much I can say to elucidate what might be gathered from his books. And it seems to me worth saying for the reason that, however pungent and straightforward his language may be in other matters, his frequent allusions to the supernatural left a good many of his readers puzzled over its exact relation to the natural. The difficulty is that in print, so far as I remember, he never distinguishes between the supernatural and the superhuman, or makes clear why he accepted the one and rejected the other. Now Buddhism holds to the supernatural, holds to it, indeed, in the extreme form of an Absolute utterly different from, and separable from, the flux and disintegration and relativity of the natural. But the supernatural so conceived is, properly speaking, not superhuman; it is within man, a part of man's being, just as the natural is; and the ultimate goal of ethics and religion is a state wherein, entirely by human effort, the dualism in man of the supernatural and the natural is dissolved, and all the passions and insatiate desires and all the unattainable strivings of nature are forever stilled. In Christianity, on the other hand, the supernatural in man is regarded as akin to, but not identical with, a supernatural which is also superhuman. Grace is the medium of co-operation between the supernatural will in man and the divine will which is God.

With this distinction between the supernatural and the superhuman in mind one can understand how Christianity brings a disturbing factor into "humanism" as Babbitt conceived it, whereas Buddhism falls quite easily into the whole scheme. Humanism has to do primarily with that plane of practical ethics where the natural and the supernatural meet together, producing a world of

harmony and order and mediation. Religion is an attempt to live in a plane above the humanistic, where the supernatural departs from the natural into its own citadel of imperturbable peace. Humanism is thus not anti-religious, in so far as it depends on the controlling power of the supernatural; but it may be non-religious in so far as its business is with the world and does not seek to escape the world. The humanist is not hostile to religion, but he should be careful not to confuse the plane of the non-religious with that of the religious. At the same time, his passage from the non-religious to the religious plane, when he wishes to make it, is simplified by the fact that the higher sphere is still human in the sense that no demand is made upon him to go outside of himself (his higher self), nor to introduce any element of the super-human as contrasted with the supernatural which was already present and operative in the humanistic sphere.

All this I could understand from our conversations at Harvard. But there was still something in Babbitt's personal attitude towards religion not clear to me, and I had even ventured in an essay published in the *Bookman* to challenge him on this point. In response he said more than once that the time had come when he ought to define his position in such terms as to leave no room for mis-understanding; and this, in fact, he undertook to do in the Introduction to his essays *On Being Creative*, published in 1932. But even there his definition is so complicated with his whole theory of humanism that I doubt if it has cleared up all the difficulties which his followers had felt; the weakness of the written word, as Plato long ago complained, is that it can make no reply to the questioner. And that is why I would supplement his published *apologia* with a reference to a last conversation with him not many months before his health was finally broken.

It was at my home in Princeton. We were sitting in a flagged porch looking out over a stretch of lawn to a background of shrubs and trees arrayed in the rich greens of early summer and bathed in the slanting light of late afternoon. Something of the magic charm of nature, to which Babbitt was always warmly responsive, perhaps also a foreboding of the end so near, opened his heart, and he spoke of his religious convictions with a simplicity and gentleness quite different from his ordinary combative manner. It was like a confession of faith, to be held sacred except in so far as it may serve to complete and elucidate his public profession.

There is in man as distinguished from the animal, he said, a something of which he is immediately, though it may be dimly, aware at the centre of his being, a something which exists apart from the desires and affections and ambitions and dejections of that lower self which is ordinarily thought of as our personality. It may be called the "ethical" will, because, though not to be confused with the lower will which is active in the affairs of life, it does yet, in some untraceable manner, make its effects felt ethically in the plane of nature. To express this indefinable relation, while maintaining intact the distinction between the supernatural and the natural, the higher faculty may be spoken of as the will to refrain, the *frein vital* as contrasted with the *élan vital;* but though it can be defined only in negative terms, it is in itself real and positive, the highest reality and the supreme factor in that which we know as our individual character. At the same time, in this deepest stratum of our consciousness, we are aware of the great paradox that this ethical will is at once both individual and universal, so that he who is most himself is also most human, thinking and acting not as an isolated atom in conflict with other atoms,

but as a being at one with the great heart of the world, strong in the strength drawn from that silence of the soul beyond the curtain of perplexing lights and noises, wherein all distractions end in peace.

I should be untrue to myself if I did not say that the refusal to admit responsibility to the superhuman, in the full theistic sense of the word, seems to me to deprive religion of its richest source of inspiration, and to leave it too often a sort of flimsy and unpractical sentiment. But I should be false to my friend if, with that last conversation in mind, I did not assert that, beneath all the fret of controversy, he himself had reached to a fountain of perennial peace and strength. In his books he may have written sometimes vaguely, and not always consistently, of religion; his life was a steady growth, not in Grace, but in obedience to the unrelenting exactions of conscience and in a sense of the littleness of men protesting against the law of their own being. There lay at once his humility and his magnanimity, and therein shines the virtue of his example.

Some time ago I was dining with Frank Mather, whom Babbitt had first met at Williams, and who from that association had come to be united with us in bonds of triple comradeship. He, too, as all readers are aware, is an advocate of humanism, and contends that only the perfect agnostic can lay claim to the Simon-Pure article. Among the guests was a Hindu gentleman of broad culture and keen perceptions, who had been recently in Cambridge and through my introduction had called on Babbitt. In the course of the evening, I asked him how Babbitt had impressed him, and his response was quick and enthusiastic: "Oh, Babbitt, he is a holy man, a great saint!" Now holiness is the last trait that most of us in the West would attribute to one of Babbitt's self-

assertive character, but the word came quite naturally from an Oriental to whom the saint is a man notable rather for his will-power than for meek submissiveness. It was, perhaps, because I ventured upon some criticism of this kind that the Hindu visitor put me in my place: "You are not a saint at all, but only a philosopher;" and then, answering a question of our host about himself, added, with a twinkle in his eye: "And you, my dear Frank, are the wickedest man I know."

PHYSICAL SCIENCE ANCIENT AND MODERN

FRANK ALLEN

SCIENCE, like all departments of human history, has had its great epochs of development. In these periods men of commanding genius appeared in surprisingly large numbers, each of whom was able to make some definite contribution to the body of scientific knowledge which determined the character of the age. In the earlier stages of advancement, outbursts of activity were succeeded by periods of stagnation lasting for centuries, during which men rested satisfied with former achievements, authority became venerated, and those innovators were sternly repressed who dared to challenge ancient knowledge and disturb the calmness of assured repose. In some way, difficult to understand, a new epoch of extraordinary activity succeeded the stagnation, as though a period of rest were required for fresh intellectual energy to accumulate by which the inertia of centuries was overcome and the mind carried to new triumphs.

Though the origin of a few of the earliest ideas of physical science can now be traced in embryonic form in Hindu and even in Chinese writers, it was through the speculations of Greek philosophers that inquiry into the system of nature first impressed itself upon the European mind with marvellous illuminating power. From the time of the earliest of these philosophers to the present, four great epochs of scientific activity may be discerned. The first epoch, as is to be expected, contains the origin of many departments of physical science. In the succeeding eras these branches of knowledge became more highly developed; and finally, in the present period, it

is for the first time becoming possible to state clearly the problem of the nature of the universe and to distinguish the avenues of approach to its solution. Of these periods the first and last are, therefore, the most significant in their relation to the problem of the physical world, while the intervening periods are remarkable for the extension of knowledge and the elevation of phenomena into principles. It is especially worthy of note that out of the early speculations on physical science philosophy itself arose. Most appropriate, therefore, is the present tendency of physical science to resume its basic philosophical character.

The first epoch of science began with Thales (640-546 B.C.), the merchant of Miletus, the founder of science and philosophy, the chief of the seven wise men of Greece; it lasted about seven hundred years with intermittent outbursts of activity and ended with Ptolemy of Alexandria about 130 A.D. Thales introduced the fruitful idea of the existence of a single elementary substance from which, by innumerable modifications, all other materials in the world were compounded. Though his choice of water as the primary element, a most fertile hypothesis for the age, and the rival selections of earth, air, and fire by succeeding philosophers were, from the modern point of view, all equally absurd, yet the idea of one eternal element always the same in essence but infinitely varied in its manifestations to sense was thereby introduced to the Greek mind and thus to the world. It now forms one of the most fundamental problems of modern science. Thales also recorded the discovery of electricity by referring to the electrification of amber when rubbed with silk. Further, he mentioned the property of magnetism and successfully predicted

an eclipse of the sun for May 28, 585 B.C., possibly the most brilliant achievement of ancient science.

In this period arose the rival speculations on the continuity or discontinuity of matter. Anaxagoras and Aristotle maintained the thesis that matter was continuous in structure and, therefore, infinitely divisible; while Democritus and the poetic expositor of science, Lucretius, upheld the theory that matter was composed of atoms and could not, therefore, be divisible beyond the limit of these ultimate particles.

In the realm of astronomy the Pythagoreans, who originated about 570 B.C., introduced into Greece, possibly from Babylonian sources, a theory of the cosmos as a system of concentric circles rotating about a central fire. These ideas were carried by their migration into Magna Graecia (Italy), and, after many successive modifications, the original scheme became heliocentric when Aristarchus of Samos (about 250 B.C.) suggested the hypothesis that the earth moved round the sun. This was the alternative hypothesis which Copernicus preferred. For through the opposition of Archimedes, whose authority in physical science in that age was supreme, the heliocentric theory was set aside as repugnant to common sense. Thus the way was prepared for Hipparchus (130 B.C.) who introduced the rival geocentric, or earth-centre, theory of the solar system, which was so elegantly elaborated by Ptolemy (130 A.D.) that it commanded the universal assent of scholars for fourteen centuries until the time of Copernicus.

If, as the Pythagoreans contended and Aristotle really proved, the earth was a rotating sphere freely poised in space and revolving round the sun, some force must exist to keep it in its orbit. It is now believed that the Pythagoreans speculated on the principle of

attraction as the bond of union between the earth and sun. In the acute minds of this school of philosophers, therefore, the idea of gravitation first dawned upon the world. More definite was the opinion of Plutarch (50-120 A.D.), who gave a clear expression of gravitation in the first century of our era. These ideas, essential to the heliocentric theory, were either repugnant or unknown to Hipparchus and Ptolemy, who revived the conception of crystal spheres concentric with the earth, which had also been suggested by the Pythagoreans and utilized by Eudoxus to account for the movements of planets, sun, and stars.

In the mystic minds of the Pythagoreans, numbers and their relationships became associated with the phenomena of the universe. These mathematical tendencies of their teaching stamp them as the founders of mathematical physics, a subject which later under the genius of Newton and his successors has brought every part of the universe within the scope of mathematical law. As an essential part of their view of the world, the Pythagoreans had considered it to be made up of discrete particles to which number could be applied. Later, rival philosophers, including notably Parmenides and Zeno, insisted that the fundamental ultra-phenomenal substance was One not Many, in sharp opposition to those who maintained the universe to be constituted of many parts, divisible, changeable, movable. To combat these ideas, Zeno ironically maintained that in such a world motion would be impossible and self-contradictory, by affirming that a body cannot move either where it is or where it is not. For obviously a body cannot move where it does not happen to be, nor if it has position can it also be in motion. He thus sets forth the idea that position and velocity are mutually exclusive

characteristics of a body. To this extraordinary dilemmatic argument allusion will be made in discussing the last epoch of physics.

From this brief *résumé* of the earliest era of science, it is clear that the versatile Greek mind had grasped the idea not merely of elementary substances but of a single primary substance to which the natural world in every aspect could be referred. The rival hypotheses of atomicity and continuity of matter were also developed and critically examined. Electricity and magnetism were experimentally recognized, and gravitation was a subject of speculation. The antagonistic heliocentric and geocentric theories of the world were weighed against each other, and the latter, unfortunately, accepted. The incompatibility of position and motion of bodies was clearly pointed out. Light and colour were subjects of speculation though little or nothing of significance emerged from the discussions. The doctrine of energy seems almost completely to have escaped detection, though the word itself and a suggestion of its use occur in Aristotle.

The long period of extraordinary brilliance came to a close. In the succeeding barren thirteen centuries of the Dark Ages, Greek scientific ideas were neglected and at last forgotten except in so far as they had received the approval of Aristotle. At length the silence of the centuries was broken. With the publication of his treatise *On the Motions of the Celestial Worlds* by Copernicus in 1543, the Revival of Learning had at length brought forth the renaissance of science. The rise of Copernicus opened the second era of investigation, which lasted about two and a half centuries, and again a galaxy of genius, culminating in Newton, illumined the world. Copernicus revived the Pythagorean doctrine

of the universe, which he fortified with such invincible arguments that the Ptolemaic system, in spite of its venerable prestige, the supporting efforts of scholars, and the enormous favouring influence of the Papacy, crumbled helplessly though slowly before them. Copernicus was succeeded by the noble Danish astronomer, Tycho Brahe, who devoted his industrious life to the accumulation of accurate observations of the positions of the planets in their revolutions round the sun, thus supplying the material required by his friend and pupil, Kepler, the founder of mathematical astronomy. Kepler assumed the laborious task of determining the type of planetary orbit that would fit the observations with precision. With astounding perseverance and resourcefulness during more than six years of incessant calculations, he tried circles and combinations of circles, but to no avail. The ancient philosophers had deeply inculcated the ideas that the circle was the perfect curve, and, since nature was perfect, that the orbits of the planets must accordingly be circular. These restrictions Kepler finally abandoned and speedily announced his first great discovery, that planetary orbits were ellipses. But a still greater triumph awaited Kepler. He discovered that the product of the square of the speed of a planet and its distance from the sun was constant for all the planets. The implications of this law are far more profound than appears on the surface. It proved that the same force operates on all the planets and that the force acts independently of the kinds or states of matter of which the planets are composed. Thus for the first time was proved the essential unity of the physical world.

Parallel with the discoveries of Kepler were those of Galileo, "the restorer of reason in Italy" and the founder of modern experimental science. The ancient philo-

sophical doctrine that the velocities of falling bodies were proportional to their weights, that is, that heavy bodies fell faster than light ones, was accepted on the authority of Aristotle without question for two thousand years. In the presence of the whole University of Pisa, Galileo ascended the famous leaning tower and simultaneously let fall two unequal weights. Both struck the ground at the same instant, and with them fell the whole system of speculative science divorced from experiment. The simplicity of the experimental method thus dramatically inaugurated, and the incontrovertible nature of its evidence, swept it victoriously over the most determined opposition of the age and established it as the accepted mode of investigation of the phenomena of nature.

Galileo also partially elucidated the characteristics of uniform and accelerated motions with their relation to the forces which produced them. It is remarkable that Kepler and Galileo both failed to realize the significance of each other's work, and consequently the two lines of investigation so closely connected remained apart until Newton brought them together in his gravitational system of the world.

Contemporary with Kepler in Germany and Galileo in Italy, was the philosopher Descartes, in France. In his speculations on the constitution of the universe, he assumed the world to be filled with moving matter, in some places forming huge whirlpools in the centres of which were stars or suns while on the rims were the planets. Even so absurd a system of the world secured the assent of scholars for a century. Upon this hypothesis Newton himself received his early training. It had two merits at least, for it ended the Aristotelian distinction between sublunary matter and that in the

stars, and, by referring all motions to well-known mechanical actions, it banished the spirits and genii which even Kepler had assumed as the guardians of planetary motions.

The stage was now set for the advent of Newton. By his proof of the law of gravitation he showed that a simple mechanism of forces of attraction, varying inversely as the square of the distances between bodies, was able to explain the laws of Kepler and all the motions of the planets without the material vortices imagined by Descartes. An immaterial and highly rarefied ether replaced the gross interstellar matter of the Cartesian world and at one stroke reduced the motions of the universe to a rational mathematical system.

In this period of science the Hon. Robert Boyle, facetiously known as the "father of chemistry and the uncle of the Earl of Cork," clarified the most puzzling problem of chemistry—one that had baffled all investigators from the time of Thales—by defining an element as a substance out of which nothing simpler can be obtained. Compounds, therefore, were combinations of elements. By both Newton and Boyle the atomic theory of matter was revived. In the same period the interest in electricity and magnetism had been reawakened and knowledge greatly extended by the experimental researches of Dr. Gilbert, the physician of Queen Elizabeth.

The contributions of physical science in this era from Copernicus to Newton may be readily summarized. The problem of elementary substances was largely solved; new phenomena of electricity and magnetism were discovered; the system of the world established on a secure foundation; and the unity of the planetary system, and, indeed, of the universe, demonstrated. To Newton the

world is indebted for the analysis of white light into the spectrum, a discovery which in recent times has been developed on a gigantic scale. For it has given us a large proportion of our knowledge of the atom, and by its application to stellar radiation it has demonstrated that the chemical elements of the earth, and these alone, are also to be found throughout the universe. The universe had thus become unified in matter and energy as well as in mathematical law. Newton also espoused a corpuscular theory of light which, after rejection for a century, has now been shown to be at least partially true.

The third era of physical science, which covered the nineteenth century, opened in 1786 when Galvani, a physician of Bologna, made the sensational discovery that electricity applied simultaneously to the muscle and nerve of a frog's leg caused it to exhibit life-like contractions. This experiment attracted the attention of Volta, and his discovery of the electric current quickly followed. In fairly rapid succession came the discovery that the electric current exerted a magnetic force, and the enormously important converse discovery by Faraday that an electric current can be generated in a wire by moving it in a magnetic field. These two great principles are the foundation of all practical applications of electricity to industry and communication. By the genius of Clerk Maxwell the mathematical theory of electricity and magnetism was developed and resulted in the remarkable theoretical discovery of electromagnetic waves, which Hertz in Germany speedily found a method of producing and detecting. These discoveries have now been applied practically to wireless telegraphy, radio-broadcasting, and television, with consequent revolutions in the science of communication. At the close of this remark-

able era of discovery, Helmholtz made the important suggestion, based upon the discoveries of Faraday, that electricity, like matter, was probably atomic in structure.

Parallel with the extension of knowledge of electricity and magnetism, were the discoveries in heat and energy. During the eighteenth century heat was regarded as a weightless substance. The suspicions of Rumford having been aroused as to the correctness of this hypothesis, he conducted a series of experiments which proved that heat was a form of molecular energy, a conclusion also powerfully supported by Sir Humphrey Davy. The coincident applications of the principles of heat to engines led not only to discoveries of the widest practical value but also to the theoretical development of the doctrine of energy. The idea that energy, like matter, could neither be created nor destroyed by finite means, or the conservation of energy, as it is termed, was first suggested by Mayer and then by Helmholtz in Germany, and finally established as a law by the experimental researches of Joule in Manchester. To the extension of its principles the mathematical genius of Lord Kelvin was largely devoted.

At the beginning of the century, Young discovered the principle of interference of light by which two identical rays of light might be combined to produce darkness. According to the Newtonian corpuscular theory of light no such effect could possibly occur. The undulatory theory of light, set forth by Huygens before Newton, was accordingly established on a strong experimental basis. The mathematical researches of Clerk Maxwell proved that light waves possessed an electromagnetic character, while Faraday and others had previously shown light to be susceptible to magnetic and electric influences.

While innumerable extensions of knowledge occurred in this century of remarkable progress, the chief advances, so far as physical science is concerned, lay in the subjects mentioned. At the beginning of this era, electricity, magnetism, and light were separate sciences; at the close they were consolidated into a single science as different aspects of the behaviour of electricity. The doctrine of the conservation of energy, unknown at the beginning of the century, was developed in sixty years into a principle of commanding importance. The progress of chemistry had greatly increased the number of recognized chemical elements whose properties Mendeléyev had shown to be periodic functions of their atomic weights. The elementary atoms, therefore, were proved to be no mere chance entities, but the plan of their structure was evidently subject to some fundamental but unknown law.

So far-reaching and satisfactory were the achievements of physics in this great era of science, that in the opinion of many investigators the age of fundamental discovery had closed. A distinguished engineer once remarked to the writer that about the year 1890 he had decided upon a career in electrical engineering because he considered physics had reached the highest development of which it was susceptible.

No interval of time but only of ideas separated the third and fourth eras of physics. In the year 1895 came the announcement of the discovery of X-rays by Roentgen, and the following year the discovery of radioactivity by Becquerel, which inaugurated a fourth era of physics destined to accomplish greater revolutions in this branch of science than any previously achieved. Amidst the bewildering multitude of new discoveries in all parts of the science, three main lines of advancing

knowledge, atomic physics, cosmical physics, and field physics, may now be discerned, which, it is confidently hoped, will ultimately lay bare the nature of the physical world.

The third era of physics closed with the view still unquestioned that atoms were indivisible. At the beginning of the fourth period, Sir J. J. Thomson and his co-workers began their brilliant series of experiments on the phenomena exhibited by the discharge of electricity through vacuum tubes in which were residual traces of gases. Aided by his powerful mathematical genius, he succeeded in establishing the existence of matter in a sub-atomic or corpuscular state. The indivisible atom of the ages was now divided. Each corpuscle possessed mass and an electric charge, and all corpuscles, whatever their source, had identical properties. The mass and charge were measured, and by Millikan the corpuscle was isolated. Speedily the distinction between matter and electricity was successfully challenged and the corpuscle, under the name of electron, was proved to be an atom of negative electricity. By this profoundly important achievement electricity was shown to possess an atomic structure and matter to be identified with it.

Parallel with the discoveries of Thomson and his school were those of Professor and Madame Curie in Paris and of Rutherford in Montreal, the former of whom succeeded in isolating radium as a new element, and the latter in analysing the complex rays which Becquerel had discovered to be emitted by radio-active elements. These rays are now known as alpha rays or streams of electrically positive helium atoms, beta rays or streams of negatively charged electrons, and gamma rays or short X-rays. To account for the origin of these rays, Rutherford suggested a disintegrable planetary type of

atom with a central nucleus composed of protons, or atoms of positive electricity cemented together by electrons, surrounded by electrons which, like planets, revolved about the nucleus. Since the heavy element, radium, in some of its transformations emitted atoms of the light element helium, the mediaeval doctrine of the transmutation of elements, in modern times held to be absurd, was sensationally revived and incorporated in science as a fundamental principle. It was found by Moseley, a lamented victim of the disastrous Gallipoli expedition of the Great War, that an element existed for every whole number from one to ninety-two. At least ninety-two different kinds of atoms, therefore, exist, all of which are formed of electrons and protons in regularly increasing numbers. Thus the periodic recurrence of properties of elements, which Mendeléyev noted, is fully accounted for.

For a time the atom was viewed as merely a diminutive solar system with an ideally simple structure. Anomalies of behaviour gradually emerged which led to new ideas of electronic structure. Then wave mechanics arose and has finally prevailed, in which an electron is regarded as a tiny group of still tinier waves in the ether with no other substantial existence. The electron in essence, but not in state, is identified with the ether. Just what the proton is cannot yet be ascertained; other than electrically it behaves oppositely to the electron.

But the atom is not merely a passive structure. It is the active recipient of energy and the radiator of light. But for atoms to receive energy implies that energy itself is divisible into discrete portions; and it is the brilliant achievement of Planck to have shown that energy is communicated to atoms in elementary units called by the vague Latin name of *quanta*. It now tran-

spires that light itself in the atom behaves as if it also were corpuscular, and, as such, an elementary quantity of light is called a photon. To add to the growing and embarrassing complexity of the atom, two new parts have been recently discovered: neutrons which are electrically neutral combinations of electrons and protons, and positrons which seem to be enlarged protons.

All parts of the atom apparently have a fundamental undulatory character; and if the ether is continuous in structure, which is at present assumed, it is only by their wave structure that atoms or groups of atoms have the power of motion. For a solid structure could not move in a continuous medium. A continuous ether implies, therefore, an undulatory atomic structure.

Three distinctive forces of attraction emanate from each atom, gravitational, electric, and magnetic forces, all of which have the same law so far as the distance through which they act is concerned. The atom must have a structure which receives, holds, and emits energy in radiant form; it has the property of chemical activity or of inertness; it possesses mass and exerts the three forces mentioned. The electric force arises from the electrical nature of its constitution, the gravitation from its differentiation from the ether, and the magnetic force chiefly from the spinning and orbital motions of the electrons. A world in itself is the atom and a perfect knowledge of its structure will carry with it perfect knowledge of the origin and character of the forces of nature.

Problems of equal importance arise from the aggregation of atoms into vast masses as the sun and stars. The magnificent achievements of Newton proved the sufficiency of gravitation to hold planets and galaxies of stars in orderly systems, but they did nothing to elucidate

the structure of the stars themselves. The development of spectroscopy in the nineteenth century enabled astronomers to ascertain that the elements terrestrially known are those comprising all the heavenly bodies. The stars may, therefore, be regarded as vast furnaces for the study of ordinary matter at temperatures immensely higher than any obtainable on the earth. The highest temperature produced by artificial means is probably not greater than about eight thousand degrees Fahrenheit, while the surface temperatures of stars range from about fifteen thousand degrees Fahrenheit for the sun to three or four times this amount for the stars. We cannot penetrate observationally to the inside of a star; but modern physical and mathematical theory is able to accomplish even that seemingly impossible feat, with the result that stellar interior temperatures are indicated ranging from about fifty to one hundred million degrees. A star is held in equilibrium by the gravitational pressure inwards and the opposing radiation pressure outwards. The latter prevents the star from collapsing, and the former prevents it from bursting. When, occasionally, the radiation pressure exceeds the gravitational, the star bursts open and appears as a new star with a brilliance perhaps twenty thousand times its former value. In a few months the star subsides into its former appearance.

It is only by its light that a star can be investigated. By examining its spectrum astronomers can determine its velocity towards or from the earth, its composition, diameter, distance, structure, temperature, density, and age. One-third of all matter in the universe is diffused through space as sparsely scattered atoms, while the remaining two-thirds is concentrated in the stars. Each star contains the ninety-two elements, but some of

these become conspicuous only by the special light they emit at the particular stellar temperatures. At low temperatures only the gases hydrogen and helium give out light; but at higher temperatures all substances in the form of vapours are recognized.

Until recently it was thought that the innumerable galaxies of stars were independent of each other. It has very recently been discovered that all galaxies are receding from each other with velocities increasing with their distances. Galaxies so distant that their light requires a hundred and fifty million years to reach the earth are travelling away at the velocity of about fifteen thousand miles per second, or rather they were doing so a hundred and fifty million years ago. The theory of the expanding universe implies that all stellar bodies had a similar origin and thousands of millions of years ago formed a compact mass. An explosion, possibly, caused the primeval mass to separate into galactic fragments flying off into space with velocities increasing as they recede. This new theory affords a definite calculable time for the beginning of the universe though it is much too short to suit some astronomers. In the end the universe seems destined to expand into invisibility, a tragedy that can only be prevented by the invention of a new theory! The problems of cosmical physics are fascinating and significant; and their solution will give humanity a knowledge of the behaviour of the world as aggregations of atoms pulsating with energy.

Modern physics recognizes the existence of space within the atom and between the stars which is immensely greater than the matter interspersed within it. Whether space is to be regarded as mere extension or as extension filled with an ethereal medium is a fundamental, but

at present, insoluble problem. The question of the function of space, always in the background of scientific thought, has now been advanced to a position of the first importance. Atoms, molecules, planets, galaxies, are formed of separated parts, but by the action of forces emanating from them they are welded together into structural unity. In pre-Newtonian times the idea of "action at a distance" was entertained, according to which the force could start from the sun and terminate on the earth with nothing happening in the space between them. In a memorable passage Newton sharply condemned this doctrine as repugnant to every mind which has "in philosophical matters a competent faculty of thinking." While admitting the necessity of continuous action of forces in the space between bodies, neither Newton nor his successors could formulate any idea of the origin of forces, or of the mode of their conveyance through space.

In the new views of the universe which have been consolidated by Einstein into a comprehensive system of relativity, space of three dimensions and time of one have been combined into a single space-time concept of four dimensions in which neither space nor time is independent of the other. The mass and dimensions of a body are so closely allied to the space surrounding them that motion through space alters their values. In the extreme case when a body attains the velocity of light, its mass becomes infinitely great and its length, measured in the direction of motion, zero. The measurement of time also varies with the velocity of the timepiece, so that at the velocity of light seconds are indistinguishable from eternity. The mass and dimensions of bodies, instead of being absolutely fixed, are exquisitely sensitive to motions and automatically adjust their values

to their velocities. The interaction between matter and space causes some modification of the latter by virtue of which gravitational, electric, and magnetic forces are enabled to act upon other bodies at a distance. A new and more accurate law of gravitation has been derived by Einstein, by which he predicted the bending of rays of light when passing near the sun.

The problems of space, or of the field between bodies, are not yet solved, but like those relating to the atom and to stars, they are at least, and for the first time, clearly stated. A clear statement of the problem is always the prerequisite of a solution.

In atomic physics the methods of investigation are experimental; in cosmic physics they are observational; while in field physics they are mathematical or pure reasoning. These three methods of discovering the truths of nature are all necessary and, it is confidently believed, sufficient ultimately to solve the great problem of the material universe.

The trend of physical science, to be properly comprehended, must, as we have seen, be viewed in the perspective of twenty-five centuries of speculation and investigation. The numerous lines of study with which it started have now been merged into three, which in turn are gradually converging into one, the problem of the ether or space itself.

In the first era of science, philosophers, by the processes of criticism and elimination, narrowed their ideas to the basic concepts beyond which reason could no further go. The Greek mind developed the concept of elements, but was divided between a multiplicity of elements and a single elementary substance, of which, by endless modifications, all else was formed. After ages of speculation and intellectual uncertainty, the doctrine

of elements has been established on an incontrovertible basis by the isolation of a graduated series of ninety-two simple substances, all of which are shown to be stable configurations of electrons and protons which constitute the two electricities. Still more basic investigations have shown electrons, at least, to be groups of wave patterns in the ether and thus have carried the idea of elementariness in its last analysis to the ether itself. As electricity and matter are now identified with each other, no substance exists in the material universe apart from the ether itself. Though the doctrine of elements has now a concreteness and a perfection impossible of attainment without experiment, yet modern science in idea has merely completed a great circle and arrived where Thales started.

The Greek mind also debated the question of the continuity and discontinuity of matter. After centuries of occasional conflict, it is only within the last thirty years that the most persistent opponents of the atomic theory have admitted its truth. But the most recent view of electronic structure holds it to be undulatory. From this it follows that there can be assigned to the electron no sharp boundary separating it from the ether of which in essence it forms a part. In a very real sense, therefore, matter has the character of continuity as well as discontinuity. The two views are curiously reconciled. Again modern science has completed a circle and has given definiteness and approval to Greek philosophic thought.

The Greek mind also conceived both the heliocentric and geocentric systems of astronomy. The contest over the rival systems was revived by Copernicus and reached its bitter climax with the persecution of Galileo. But the modern doctrine of relativity has now removed the

subject from the realm of controversy by proving that the same effects, such as the distortion of the spherical shape which the earth exhibits because of its rotation, could equally well be produced on a fixed earth by a revolving system of planets and stars. In this most famous of all scientific controversies, modern development has justified both concepts of Greek astronomical thought.

One of the most remarkable and fruitful of recent physical ideas is the "uncertainty principle" of Heisenberg, which states that a particle cannot simultaneously have both position and velocity. In the physical world position and velocity are mutually exclusive concepts. Ages ago, as we have seen, Zeno most acutely arrived at the same idea though he used it to combat the Pythagorean concept of nature. For a fourth time, therefore, physical science has completed its circle of thought, and arrived at the concept of Zeno.

Nor did many of the general ideas of the philosophy of relativity escape the Greek mind, though it is only in our own time that they have assumed a mathematical form under the genius of Einstein.

It has been remarked that philosophy grew naturally out of the speculations of philosophers on the fundamental concepts of nature. Throughout the Middle Ages philosophy and science gradually drifted apart, the former becoming more speculative and the latter more restricted in scope and more concrete in formulation. But as the developments of physical science have approached more nearly the fundamental concepts of nature, the character of physics has in part changed so that a reconciliation of the two great departments of knowledge is evidently in progress. Such a *rapprochement* is as satisfactory as it is inevitable; for both branches

of thought deal with the fundamental concepts of the universe from their respective points of view, and, from whatever aspect it may be regarded, it is necessarily the same universe to all minds.

In circumnavigating the world of ideas, physical science has accomplished far more than a return to its starting point. In the long intellectual journey multitudes of new facts have been discovered, many far-reaching principles have been formulated, great vistas of knowledge have been glimpsed and some of their paths traversed. If each generation of scientists has seen farther than its predecessor, it is, in the words of Newton, because it has stood upon the shoulders of giants. The fundamental principles now firmly established have acquired in the process a wealth of significance impossible of realization by their ancient originators.

The physical world is a mechanism though it seems to be of such a type that we can construct no model of it in the fashion of the Victorian physicists. But while the mechanism always exists, the complete knowledge of it still is lacking. While space and time seem indissolubly united, and matter and energy are regarded as inter-transformable and both identified with electricity, the ultimate nature of the space-time continuum is yet to be discovered. In a real world the nature of reality itself is an extra-scientific problem, and with the nature of mind and knowledge through which it is apprehended, it must be referred to the philosophers, with whom physical scientists, or, in the older usage, natural philosophers, have now revived their ancient alliance.

PERSONALITY, PROPERTY, AND COMMUNISM

JACQUES MARITAIN

THE following article makes no pretence either of treating the problem of property in its full extent or of propounding a new theory of property. It relates simply to the doctrine expounded by St. Thomas and his commentators, a doctrine of which it presupposes some knowledge. Its purpose is merely, in a deliberately brief and schematic form, to draw attention to certain fundamental principles bearing on the metaphysic of man's being and action, principles which in our opinion dominate the problem but which have not always been disengaged with sufficient care.

It is generally recognized that for St. Thomas Aquinas the problem of property has three successive stages: in the first stage St. Thomas shows that man, considered as a specific type of being, has a general right of appropriation over all material goods, the *vocation* of these being to serve man, and their appropriation by man being the ultimate realization of a finality rooted in the nature of things; the use (*usus*) which human liberty makes of them appears as the common actualization of this liberty, which thus exercises its dominion, and of their natural destination, which is thus achieved.[1]

This is the primary truth which dominates the whole debate, and it shows that every person, by the mere fact of belonging to the human species, ought in one way or another to profit by the advantages of the common destination of material nature to the good of the human species.

At this stage the question of individual appropriation

[1]St. Thomas, *Summa Theologica*, II-II, 66, 1.

does not come up, and it is this very question which appears to constitute the difficulty of the problem.

At the second stage, St. Thomas shows that the appropriation of external goods should normally be the act of a person. The dominion of man over material goods implies, in effect, a power of managing or administering, and of utilizing, these goods (*potestas procurandi et dispensandi*),[2] which in general is properly exercised only by an individual person (only by this means can one hope to obtain in a natural way the necessary care in the management of goods, public tranquillity, and absence of confusion in labour); hence it is *natural reason* which establishes as the fundamental rule of the human possession of goods the rule of individual appropriation:

> For if a particular piece of land be considered absolutely, it contains no reason why it should belong to one man more than to another, but if it be considered in respect of its adaptability to cultivation, and the unmolested use of the land, it has a certain commensuration to be the property of one and not of another man . . . .[3]

It is none the less true, however, that the use (*usus*) of these goods ought to be common and ought to be of advantage to everyone by reason of the common destination of all material goods recognized at the very outset:

> The second thing that is competent to man with regard to external things is their use. In this respect man ought to possess external things, not as his own [*ut proprias*], but as common [*ut communes*], so that, to wit, he is ready to communicate them to others in their need.[4]

The third stage relates to the particular *modalities* of property. These are subject to historical evolution: legislation and custom cannot, without violating natural

[2] *Ibid.*, II-II, 66, 2.
[3] *Ibid.*, II-II, 57, 3.
[4] *Ibid.*, II-II, 66, 2.

law, abolish the principle of the right to private property, but they can variously regulate the exercise of this right as the common good demands.[5]

It is with the second of the three stages here distinguished, with the problem of individual appropriation considered in general and apart from its particular *modalities*, that this article is concerned. Its object is to determine more precisely what it is in human nature which supplies the general foundation for the right of personal property; or, to put it in another way, what it is in human nature which demands that material goods should be individually appropriated. This right will thus be based, speaking broadly, upon a general exigency of human nature (irrespective of the particular titles according to which appropriation must take place, depending on differing individual cases and differing historical conditions—matters which constitute quite another problem). The exigency with which we are concerned derives, we believe, from the activity which we may call constructive or, in the largest sense of the word, *artistic*, and which is natural to human personality.

I

Personality and the *Factibile*

1. Practical human activity may be divided into *poetic* or constructive activity, having for its object what the Scholastics call the *factibile*, that is, something to be elaborated or produced, and moral or ethical activity, having for its object what the Scholastics call the *agibile*, an act-to-be-done.

2. If one penetrates to the fundamental principles of the philosophy of St. Thomas, it will be evident that the

[5] *Cf. Sum. Theol.*, I-II, 95, 2; St. Thomas, II, *Polit.*, *lect.* IV.

entire problem of personal appropriation is contained within the two branches of an antimony, between two extreme and apparently contradictory affirmations: that in human nature which belongs to the operative reason (to the *factibile*) demands individual appropriation; that which belongs, on the other hand, to the moral side of the use of earthly goods demands that, in one way or another, they serve all. The human personality as an intellectual *operant* gives the right to property; the personality as a moral agent is bound to a *common use* of the goods thus appropriated.

3. The Scholastics define art as *recta ratio factibilium*, the correct intellectual determination regarding the works-to-be-done, and they oppose art to prudence (*recta ratio agibilium*).[1] We shall employ *art* here not in the narrow sense in which it is set over against labour and play[2] but in its most general sense—that of an intellectual activity, producing a work or elaborating matter—as opposed to moral activity which involves the exercise of free choice (*liberum arbitrium*). In this productive activity lies the metaphysical exigency which, in human nature, calls in a general sense for personal appropriation and thus constitutes the ground of the right to property.[3] Such a work need not be artistic in the ordinary meaning of the term, but it will always be artistic in the extremely general sense in which we use the term in this paper. It will always be the application of human reason to a matter which is to be elaborated, and it thus belongs to the order of the *factibile*, thus resting still on the metaphysical foundation of property, whether it be the work of a hod-carrier or of an artificer.

[1] *Cf.* Maritain, *Art and Scholasticism*, ch. iv, n. 4.
[2] *Cf.* Etienne Borne, "Travail et esprit chrétien" (*Courrier des Iles*, no. 1).
[3] This is by no means the same thing as labour considered as a title to property, although the latter is, so to speak, an application and determination in extremely variable modes of this metaphysical basis.

4. We say that the artistic activity is the *formal reason* for individual appropriation, because it supposes the rationality and personality of the subject. In the case of the bee or the beaver, there is properly speaking no artistic activity, no operating reason, and no individual property.

The notion of personality must, then, intervene in any complete theory of property, in the form of the proper subject of operative intelligence.

5. In the ontological and immanent order, the personality has the disposal of itself—of its nature and of its actions. In the theological order, the personality of the Logos, in a similar way, possesses its human nature. Such is the first metaphysical basis of property, but a basis which is valid for the possession of material and external goods only if one invokes the *factibile* and the artistic activity.

It is of the very essence of this activity to imprint upon matter the mark of rational personality. Now, by reason of what the work of art, or simply the work-to-be-made, most essentially needs, it demands by its very nature the maximum of freedom for man over the matter in which he must work, and it tends inherently to give to the worker a lasting and exclusive disposition of the matter and the means of his work. This can be realized only by a general order of individual property, whatever may be the particular *modalities*, more or less advantageous, of its realization; even if there be some workers who are not owners of the means of their work (the wage-earners), or if there be certain types of work, certain *factibilia*, which in consequence of special circumstances escape private control, as happens with the public services of the state or with enterprises which it administers.

In the former case, the wage-earner is considered as

himself a member of another man whom he *serves* and whose practical reason, in the first place, regulates and determines the work to be done; and inasmuch as he is the *means or organ of another*, he has not property (or co-property) in the enterprise. Nevertheless, his dignity as a *person* elaborating matter and thus master of matter, is not destroyed, and in this form the individual appropriation, which is a fundamental demand of the *factibile*, is valid also for him in what concerns the product of the work (*i.e.*, the profits, for which a fixed wage is a substitute).

In the second case, the work of the civil servant is grafted on that of the independent worker and presupposes it; by the very nature of things the work of the civil servant is exceptional and restricted to what concerns the common good of the community.

6. By reason of the *factibile*, of the artistic activity, the person's possession of himself extends, then, to a possession of things.

How? By those inherent qualities which the Scholastics call *habitus* (ἕξεις), stable dispositions which perfect the subject, especially in the operative order. The bee's artistic activity (if one may thus employ the word artistic equivocally) proceeds from its specific nature, but the artistic or productive work of man proceeds from the individual's personal activity and *habitus*. The word *habitus* is itself significant: one has (*habet*) what the other hasn't.

This is why the work of art, or simply the thing-to-be-made—the *factibile* which proceeds from the *habitus*—requires the personal power of administering and using (*potestas procurandi et dispensandi*) of which St. Thomas speaks: it demands that objects, the materials and the means of work, should be possessed by man as a personal

possession, lasting and permanent as befits an agent intelligent and capable of foresight, linked with the future by his judgments and his activity. In short, that which serves the work of the person must be *the thing of* the person, *the thing of* the reason which does the work and which is an individual reason, individually perfected.[4]

A further consideration is that the worker, whose foresight is exercised in the interest of his work, is normally also the head of a family, and as such exercises his foresight in the interest of his children. The work he performs is related not only to himself but also to the group of which he is the head. A close relationship is thus established between personal property and the family viewed as a primordial society, prior to the state. To prevent external things becoming *the things of* the family and being thus transmitted by inheritance—according to varying *modalities*—to the members of the family, is to destroy its material basis. It is by envisaging the head of the family as a worker or artificer, as an operative reason, that one sees this truth emerge.

If, besides, civil life involves a mutual communication which is affected by the individual wills of private personalities, and thus testifies in the life of society itself to the freedom of action of these personalities and presupposes the private possession of the things which the individual personalities can communicate to each other by purchase, sale, gift, *etc.*,[5] this is because the personality is a subject of operative intelligence, it is because the personality is responsible for communicating to material things a rational elaboration.

[4]It is easily understood that by a peculiar illusion, machinery, when one forgets the capital of art (in the large sense of the term) which it sets in operation, entails the apparent destruction of the right to property, in favouring the belief that human life can dispense with personal *habitus* and operative intellectual virtues, the whole labour with matter which it demands being performed by a world of automata; whereas the making of machinery and the running of it, far from superseding art, merely carries it, so to speak, to the second degree.

[5]*Sum. Theol.*, I-II, 105, 2.

The metaphysical basis of private property thus concerns the artistic side of human nature. The *vocation* of human nature to elaborate matter rationally demands in a general way that the external things with which or by which the elaboration proceeds be possessed exclusively by the individual personality which is the operative agent. Here we see the metaphysical basis of the two titles to private property: occupation (the first occupant takes possession of a good *in view of* the elaboration he will make of it) and work.

8. This is a universal basis and one founded in right. Because of the disorder natural to human things, it seldom happens that in actual fact the best practical intelligence is the possessor of the things which correspond to his *habitus*. This is a disorder. But a certain disorder is inherent in the very existence of human things, and what we are seeking is the general foundation of the right to property in so far as it is required once and for all by the human personality. We are not concerned with particular conditions to which each individual should be obliged to conform in order to be a legitimate possessor.

9. Still one may affirm that a society will be always the better in the measure in which technical competence and effective work are associated with the possession of property. Further, when the disorder to which we have referred goes beyond a certain point, particularly when *supra*-individual forces and formations, irresponsible and acting without rational regulation, impose their disorder on the administration of material goods and *in fact* expropriate competence and labour, although in an order founded on private property, then a revolution in the body social becomes inevitable.

10. Finally the state and just laws may intervene, not, indeed, to deprive citizens of their right to property but

to regulate and prescribe, in conformity with the common good, the exercise of this right and even in certain extreme cases to suspend its exercise, for example, in the case of those who refuse to develop the goods which they possess (*latifundia*) or who would destroy, instead of developing them.

11. The *modes* of individual property normally follow those of the work-to-be-made, of the artistic activity, the *factibile*. It follows that work upon the soil has a natural tendency towards the *familial* type, even when it utilizes mechanical processes, being typically appropriate to the work of a family group, to the art which may be exercised by the head of a family with the assistance of the members of his domestic society (which may comprise a greater or smaller number of associates, collaborators, or wage-earners).

On the contrary, the industrial mode of production has an inherent tendency towards a social form of property (co-property), especially in plants so large as to exceed the normal scope of family labour (as it reveals itself in agriculture or the crafts), and to be typically proportioned to the art of a kind of technical community, or city, whose heads are, as it were, the administrators of the *factibile*. In fact, it actually presents itself as a hive of share-holding owners, and of technicians and operatives in their service, the wages of the technician and the operative (immune from participation in the risks of the enterprise) being a substitute for his profits as a co-proprietor of the enterprise and of the products of its activity. This régime has given rise to such grave abuses that a return to normal functioning seems to require an orientation towards a type of industrial ownership in which the enterprise would become, as it were, a hive of technicians, operatives, and investors, each a co-proprietor in the enterprise.

II

Usus and Common Utility

12. The thesis of St. Thomas is that the *usus* ought in some fashion to be common, that is to say, that it ought to be profitable to everyone. It will be helpful here to return to the technical sense which St. Thomas gives to the notion of *use* in speaking of the *usus activus* in his analysis of human acts:

> The use of a thing implies the application of that thing to an operation. Hence the operation to which we apply a thing is called its use. Thus the use of a horse is to ride, and the use of a club to strike. [Note that if *equitare* is the *usus equi*, *ditari* is not the *usus divitiarum*. This would make the perfect formula for the aberration of capitalism.][1]

St. Thomas further explains that we apply to this operation the internal faculties of the soul, the members of the body, and external things (*sicut baculum ad percutiendum*). This is the *usus* which concerns us: it is an act of the will in its free exercise; and here we are no longer in the order of the *factibile*, of artistic activity, but in the order of the *agibile*, on the plane of morality. Let us take the example of the club. There is a technique for getting the club and for wielding it; but the wielding of the club, an art from the point of view of the *factibile*, is also a moral act from the point of view of the *usus*. Similarly, the administration of my goods which in the order of the *factibile* is a technique and which I exercise personally, is also a moral activity (*usus*) which, as such, should aim at the good of all in some way—my own good first, but my good only in so far as I am a member of the community.

St. Thomas teaches in the second article that the *usus*

[1] *Sum. Theol.*, I-II, 16, 1, c.

is not consonant with unreasoning animals and that it presupposes free will; and in the third article that there is no use of the final end. The end is to be enjoyed. Only the means, useful things, are to be used. Finally, in the fourth article the *usus* follows upon choice. Choice is the final stage of willing in its free relation of affective union and interior proportionment to the thing willed; but following this there is another surge, as it were, of the will; and the *usus* is then the final stage of the will in its tendency to *real union*, to the real obtaining of the means willed.

13. Use should, in some measure be common. "As for use, possessions should in some measure be made common."[2]

This law derives in the first place from the primitive universal destination of material goods. This destination of earthly goods not to the individual but to man, to human nature, always exists and takes precedence over everything, since it is original, since it is the *raison d'être* of the very *right to possess* material things (prior to the *individual* possession of these).

In the second place, and this is another aspect of the same argument, the law according to which the *usus*, or the advantage, of material goods should be common may be derived from the nature of the *usus* as such. The *usus* has to do, in essence, with means, and it is in respect to these, the final act by which the will applies the faculties to real possession, to *real union*: it is the final act of moral freedom in respect of means, of useful things.

The act with which we are concerned is itself mine and personal, but its relation to external goods does not in any degree constitute for me a right of property over them (it presupposes this right.) It would not constitute for

[2]St. Thomas, *Comment. in Politc Aristotelis*, lib. II, lect. iv: "Unde manifestum est quod multo melius est quod sint propriae possessiones secundum dominium, *sed quod fiant communes aliquo modo quantum ad usum.*"

me such a right unless I were personally the end of this useful thing, unless this latter were by nature destined for me, which is not the case (since by nature it is destined for man in general), or unless the fact of relating a good to myself as its end, that is of relating it to my natural love of myself, sufficed to create for me a right over the good in question (and this also is not the case).

Further, in considering exclusively the aspect of the *agibile* or of the status of moral acts in the movement of man towards his final end, one can find no reason why one personality (each personality being a whole set over against the world) rather than another, should have the use of the things the world contains.

Hence from the point of view of the *usus*, the point of view of the moral use of external goods, there is no basis for personal appropriation, but merely for the common destination which must be realized in one mode or another analogous to it. And this ordination to the common good must be realized *everywhere*, and not merely in the case where it finds, as it were, a material embodiment in the gift to the common use of what we have in excess of our needs. To this latter we are, of course, morally bound.

In every human act which bears upon external goods, we shall find the two aspects, the *factibile* and the *agibile*, labour and moral use. Both, and hence both personal appropriation and common utility, should shine forth in every action which concerns external goods.

Let us consider a use whereby my will applies my faculties to the enjoyment of a material good, to the consumption or to the expenditure of it; whether it be a matter of eating a fruit or of spending my money in buying a copy of *The Critique of Pure Reason*. There is use and individual enjoyment of this fruit and of this money and of this book, and even, in what concerns this

enjoyment, the metaphysical basis of personal appropriation is to be found in the exigencies of the *factibile* (the sustenance of my physical and intellectual machinery). But where in all this is the reverberation of the law which demands that use be common? In this: that this machinery itself should serve the common good. And if my activity is dictated by reason, not by greed, it is implicitly ordained for the common good without my having any need ever to think of this connection.

14. Some important consequences flow from this. We shall group them in three observations:

(i) All use of a good, if not regulated by reason, is an act of avarice which frustrates others of what is due them. This is valid for the necessary as well as for the superfluous; in all use of an external good regulated not by reason but by passional egocentricity, I sin not only against God and myself but also against my neighbour. In none of my acts am I alone: the poor are always with us; in all our acts they claim their rights.

(ii) The law of common use has an evident bearing upon the utilization of goods, on the fruition and the enjoyment of goods; this is realized in two ways, provided for by the ancient law,[3] whether the enjoyment of certain goods is really common, or distributed among all, or whether, on the contrary, the communication of goods occurs by an act of the will of their possessors, by gifts, purchases, sales, loans, leases, deposits, *etc.* But the law of common use has also a bearing upon the *cura*, upon the administration of these.[4] Under a certain aspect, in so far as it is an *usus* (and not in so far as it is a technique), the administration of goods demands their delegation to the common good.

The acquisition and the expenditure (or utilization)

[3] *Sum. Theol.*, I-II, 105, 2.
[4] *Loc. cit.*

which I make of my goods and which, as such, are in the province of art and technique, and which I conduct as a responsible possessor, should both, by the exigencies of the moral use that they imply, serve the common good and be of profit to all.

The law may intervene at this point even before any consideration of the superfluous arises and even before any distinction between the necessary and the superfluous is made.[5] At the point reached we are in no way concerned with the question of knowing whether he who possesses should give to others out of his necessary, or merely out of his superfluous, possessions; we are concerned rather with the necessity of an organization, of a social structure, which shall assure a certain amount of common enjoyment (*fructus*) and also a certain amount of common administration (*cura*).

It will be noted that there is a repercussion of the exigencies of moral use (*usus*) upon the control and the administration, upon the *cura*, the *procuratio* itself; it is in this way that we may already cite, in our own time and in countries where property is private, several examples of industrial enterprises in which the workers are associated in the management of the enterprise without their being considered co-proprietors, but merely wage-earners, therein.[6]

(iii) Only at this point arise the questions concerning the superfluous and the duty of disposing of it for the common good. These questions concern individual casuistry rather than legislation or the science of society. The laws which have to do with them (sumptuary

[5] *Cf. Comment. in Polite Aristotelis*, lib. II, lect. iv: "Quomodo autem usus rerum propriarum possit fieri communis, hoc pertinet ad providentiam boni legislatoris."

[6] *Cf.* the experiment tried at Glenwood by the Baltimore and Ohio Railway (H. Dubreuil, *Standards*, Paris, 1929, pp. 367 *ff.*, and Otto S. Beyer, *Bulletin of the Taylor Society*, February, 1926).

legislation, income taxes, *etc.*) are normally only substitutes for individual virtue. They are not adequate to proper organization of the *usus communis*. Whereas, from the point of view indicated in the preceding observation, the law is exercising its primary and proper function.

If we were to limit ourselves to the consideration of the necessary and the superfluous and bring into operation the principle of *usus communis* only in this special case, we should have a too narrow, a quite ineffectual, view of the problem.

Let us add that here justice will assure only a minimum. The exigencies of common use go beyond justice and demand the intervention of friendship as well in the structure of the community.

15. When the common use of goods falls below a certain point, a revolution in the body social is inevitable.

The mode of common use, the way in which the goods of each individual satisfy the obligation of being advantageous to all, follows the mode of morality, individual and social; it thus demands also to be assured by the "just laws and fine customs" of which Aristotle and St. Thomas speak.

One may think that in our contemporary society the disorder has reached a very high level, individual ownership being greatly menaced in what concerns the operative reason, or in what is postulated by the convenience of labour and of the artistic activity (in other words, in the line of the *factibile*), and the general distribution being very attenuated in what concerns the moral reason or in what is postulated by the convenience of moral activity (in other words, in the line of the *agibile*),—the evident exigencies of modern legislation really do not assure in this connection more than a strict minimum as a compensation for the absence of spontaneous *common use*.

16. One may say that in the degree to which art is inhuman, property also is inhuman: however, like art, property is a profound need of human nature. Art, in the most general sense of the term, and property, are rather matters of the intellect, of the practical intelligence.

Use, on the contrary, with its obligation to be of advantage to everyone is rather a matter of will and morality. From this it will be understood that it is moral claims, humanitarian claims, which work against property, and technical and intellectual claims which work for it.

The fundamental weakness of communism is, on the *ethical* plane, in that which concerns the law of common use: this is but very imperfectly secured by the state, and its spiritual basis is ultimately personality and love. No social organization, no matter how necessary to common use it may be from other points of view, can take the place of the most human of the *modes* in which goods are communicated, the *mode* of friendship which gives to men the savour of living and which, if it is to be general in a state, presupposes a general respect for the soul and the personality, and a social structure in its basis spiritual.

On the side of the *factibile* and the needs of human activity, of the rational elaboration of matter, the chief objection to communism is on the intellectual plane; the individual appropriation of material goods is a demand of the spiritual basis of the person in so far as the person is an intellectual subject imposing form upon matter.

In the domain of purely material production (especially when this is industrial), communism, at the price of tyranny, can exalt for a certain time the operative activity of the human reason. Nevertheless, it can do no other than injure or thwart this activity on the plane of the highest values of civilization, on the planes where art, as disinterested speculation, depends most closely upon

the exigencies of those things-to-be-made or to-be-contemplated which touch the transcendental order.

We have said that in the domain of material production communism can for a certain time exalt operative activity at the price of tyranny, and only at this price. Let us recall the three chief conditions which, according to St. Thomas, are indicative of good work in the community: the care requisite to the administration of goods, the absence of disorder in work, public tranquillity. If it is possible to realize these conditions only in a régime of which the fundamental rule is that property is private, this is because they have to be realized in a manner suitable to an order truly stable and truly human: that is to say, according as they are realized in a natural and free mode of activity in which organization—the work of reason—perfects, and does not destroy, the spontaneous forces of nature and the free play of human activity.

When a régime where property is private is stripped of personality and passes *in fact* under the dominion of inorganic and collective forces, these advantages, as our present society shows, disappear.

In compensation, where the restrictions of the community can in a certain measure replace a natural and spontaneous order, these same advantages may be realized in a society fundamentally collectivist; but such a realization will be artificial and tyrannical. Only at this price can a communist economy function and succeed. If the individual attends to the wise management of the goods committed to him this is no longer because he has a direct responsibility to the work itself or to the thing in question, which is no longer *his thing* and the success or ruin of which no longer immediately affects or concerns him; it is rather because he is responsible to the community, of which he is the servant—to other men who

will punish him if he does his work badly. If in such a régime work is done without confusion or disorder in the body social and the public tranquillity is maintained, this is thanks to an iron constraint imposed upon the individual by the community, upon the workers by the directors charged with the rational regulation of the labours undertaken.

18. It will be evident how communism is obliged to postulate a fundamental change in human nature: communism must seek incitements to work and to *good* work, not in the individual interests of persons (interests which the *bourgeois* order has, indeed, utterly debased and which need be neither selfish nor servile nor linked to the desire to amass boundless wealth) but in a pure mystical devotion to the community, and in an Elysian joy in labour. Communism leads men into this blessed state by the crack of the whip, and, for want of better incitements, by the threat of death from starvation, and by the subjection of their imagination to all the myths of propaganda. The necessity of changing man into a joyously depersonalized slave at the service of the communal labour is the material basis of the communist effort to change man into an atheist: for God is the supreme interest of the human personality, the interest which can be subordinated to no other.

HEINE'S VAUDEVILLE

BARKER FAIRLEY

IT is no exaggeration to say that Heine is the most widely read and widely enjoyed of all lyrical poets, unless, perhaps, we except his ancestor, the Psalmist. Neither the songs of Shakespeare nor the songs of Goethe have quite achieved the international success of *Du bist wie eine Blume* or of *Im wunderschönen Monat Mai*. If a universal ballot could be taken covering the last century, Heine would be an easy winner. Not that he would score heavily at first. A century ago—in 1834—the now famous *Buch der Lieder* was before the literary public but had hardly reached it. The first edition, of 1827—itself a re-editing of verses previously published and dating back to 1821—met the need for ten years, and it was only with the second and subsequent editions that its wider popularity came. From then on, however, it carried all before it: if not in Germany, where its French and Jewish affinities have been so ungenerously remembered, at any rate in France, in England, and, it is safe to say, in all countries where German was translated or read and an interest in lyrical poetry existed.

There is little to be gained by quarrelling with this popularity and few outside Germany will be prompted to do so. Yet a double charge can be levelled against it: first, that it has obscured the richer Heine—the Heine, shall we say, of the *Romanzero*; and, second—here may lie the cause of the obscuring—that it is due to a misreading of Heine, a misreading which, beginning early, has perpetuated itself and quite overlaid the meaning that the poems had for their author. The stronghold of Heine's dominion—in foreign countries where his hold is

securest—is the young reader, new to the German language and flattered by the discovery that here are poems, German poems, that he can read without a dictionary—almost as easily as if they were in his mother-tongue—deceived, too, by their pervasive note of simple feeling into taking them at their face-value and believing that they are the ingenuous love-poems that they at first sight seem to be. Such a reader, returning to them in after-life, courts disappointment. No less a person than Robert Bridges found it so and said it in rhyme:

> Be these the selfsame verses
> That once when I was young
> Charm'd me with dancing magic
> To love their foreign tongue,
>
> Delicate buds of passion,
> Gems of a master's art,
> That broke forth rivalling Nature
> In love-songs of the heart;
>
> Like fresh leaves of the woodland
> Whose trembling screens would house
> The wanton birdies courting
> Upon the springing boughs?

How beautifully he fell into the trap! And he a poet too, though not much of one in these verses. The only line in his metrical definition that might be allowed to stand is "Gems of a master's art." But the phrase is not stressed and serves chiefly to pad the stanza. Certainly the emphasis is all on "the heart," "Nature," and her wood-notes. It is not surprising that he felt let down on that later day and even forgot himself so far as to tear up the once-loved volume—it would seem—stamp on it, and leave the room. Such, at least, is a plausible reading of the lines that follow and conclude the poem:

Alas, how now they are wither'd!
  And fallen from the skies
In yellowy tawny crumple
  Their tender wreckage lies,

And all their ravisht beauty
  Strewn 'neath my feet to-day
Rustles as I go striding
  Upon my wintry way.

Strange, that one poet should so completely misunderstand another. It is essential to the understanding of Heine the poet, and to the linking-up of this first stage of his art with the later stages, that these lyrics, on which his chief fame still rests, should be seen to be neither "buds" nor "flowers" of passion—though in their way "delicate" enough—and, far from attempting to rival "Nature," written with as little nature and as much sophistication as the lyric allows. The fact that he borrowed the stock-in-trade of German folk-poetry—all ready to hand in the *Wunderhorn* which came out when he was a boy at school, just ripening for it—does not lessen the sophistication; it heightens it. Once it is recognized that Heine came to this folk-tradition from outside, not, like Uhland and Wilhelm Müller, inheriting it from his forbears, but consciously adopting it—hence in its literary aspect the German resistance to him—the irony of his verses will be seen to reside, not so much in the sardonic twist which he often gives them at the end—the *Stimmungsbrechung* that used so to distress the old-fashioned misreaders—Bridges, no doubt, among them—nor in the occasional use of unpoetic or slangy vocabulary, but in the whole of a poem from first to last, in its apparently sincere moments not less than in its moments of frivolity. Born into a society not practised as we are to-day in detecting the poet's tongue in his cheek, it may

well be that Heine carried his art of deception further than he would have chosen, further even than he knew, and that he had himself to blame if he was read oversentimentally more often than not. Everything pulled in the sentimental direction, the composer Schumann not least, who, if not without irony, as his setting of *Der arme Peter* shows, had much less of it than Heine and may be fairly said to have fixed the wrong tradition almost at the outset. How persistent this tradition has been is well shown by Mr. Alexander Gray's recent wrenching of Heine into Scots—as if Heine were a sort of Burns. Heine in Cockney is just thinkable, but in Scots, no. On a first-class tin-whistle. Well and good. But never on the pipes.

The result of all this is that Heine has floundered for a century in the cross-currents of elementary likes and dislikes when strictly he is something of a modernist—with closer points of contact with the inventor of Prufrock than the latter would enjoy—a modernist in his shifting of poetry from the hedgerows to the boulevards, a modernist in his cool-headed management of his emotions, a modernist most of all in his complete and utter sophistication. For one poem in this collection that escapes analysis and plays irrationally on our emotions—as, for instance, No. 87 in the *Heimkehr* group, which says: "Death is the cool night and Life the sultry day. It is darkening now, I am sleepy, the day has wearied me. Over my head is a tree, the nightingale is singing in it, singing of love. I hear it even in my dream."

Der Tod, das ist die kühle Nacht,
Das Leben ist der schwüle Tag.
Es dunkelt schon, mich schläfert,
Der Tag hat mich müd' gemacht.

Über mein Bett erhebt sich ein Baum,
Drin singt die junge Nachtigall;
Sie singt von lauter Liebe,
Ich hör' es sogar im Traum.

—for one poem of this sort there are twenty and more that we can see through and reduce to their intellectual statement, their intellectual achieving of effect. Take No. 47 in the *Lyrisches Intermezzo*. The statement is: "They have tormented me to death, some with their love, some with their hate; they have poisoned my food and my drink, some with their love, some with their hate. But she who has tormented me most has never loved me nor hated me."

Sie haben mich gequälet,
Geärgert blau und blass,
Die einen mit ihrer Liebe,
Die andern mit ihrem Hass.

Sie haben das Brot mir vergiftet,
Sie gossen mir Gift ins Glas,
Die einen mit ihrer Liebe,
Die andern mit ihrem Hass.

Doch sie, die mich am meisten
Gequält, geärgert, betrübt,
Die hat mich nie gehasset
Und hat mich nie geliebt.

Observe the half-nonchalant alliterating *blau und blass*, the rhetorical rise in feeling induced by the three alliterating g's in the sixth line, the repetition of the antithetical couplet, followed by the crescendo of *gequält*, *geärgert*, *betrübt*. Examined thus briefly, the poem reduces itself to a piece of skilful calculation. It may be too much to say that the poem is wholly calculated, since for better or for worse it is a poem and, indeed, a good example of Heine in his first period. But, granting all

this, could any poem have less in it that is uncalculated? What is it but a neatly drilled epigram which steps forth, lightly costumed, on the miniature stage of the lyric, goes through its rhythmical paces, and withdraws, creating an emotion, or the illusion of one, by sheer technique, much as the trained dancer can fill the theatre with joy or sorrow, yet feel none of it herself?

If there is anything in this view of the Heine song—surely it is nearer the mark than that more prevalent one voiced by Bridges and tacitly endorsed by the average Heine lover—it follows that Heine owed little enough to particular experiences but relied chiefly on a certain innate amorousness which he could turn on or off at will. What Taine said of *In Memoriam*—that its tears were too carefully dried with a cambric handkerchief to convince us of their deeper sincerity, or words to that effect—is truer of Heine than of Tennyson. For, whatever the shortcomings of *In Memoriam*, but for Arthur Hallam's death it would not have been written, whereas Heine's songs would have been written in any event. Failing Amalie to inspire him, there was Therese, as he seems to have discovered. And, failing either of these, another would have served and probably did serve. With occasional differences of externals, the songs are the same throughout, whether in feeling or in execution. How different was Goethe who never fell in love the same way twice, never sang the same songs over again. What Professor Hermann Walter says of Heine—"the further he gets away from the outer *Erlebnis* the greater he becomes as an artist"—is particularly true of this early phase. Here he is the artist-poet pure and simple, dependent on nothing outward, self-equipped to write this type of lyric and to master it.

In this light the artificiality of mood in the *Buch der*

Lieder—conspicuous even in a Romantic age—becomes more intelligible. The discrepancy between Heine's robust animal spirits and, say, No. 6 in the *Lyrisches Intermezzo*—a famous song—in which he says that "when at last he holds his loved one in his arms, he will die of yearning:"

> Und wenn dich mein Arm gewaltig umschliesst—
> Sterb' ich vor Liebessehnen!

has often perplexed his critics, as well it might, if they tried to explain it away. The only solution is to accept it for what it is—a clear case of Heine's virtuosity invading even his sensibilities and letting him prefer an artificial emotion, of which he would be incapable in real life, to an instinctive or a natural one. Heine, the man, was free from all morbidity—no man more so, as he proved on his death-bed—but Heine, the artist, throve on sophistication and could trust it unreservedly, no matter where it led him.

In the prose region, it is much the same. After the deliberate brilliance of the *Harzreise*—all carefully composed and polished—it is almost with a shock that we open the letters and find that the artist is scarcely discoverable in them. After Lamb and Edward Fitzgerald what a come-down! One would have thought that Heine was an adept at letter-writing. And so he was when he sat down professionally to the job, as he did with eminent success in his early years in Paris. But when he writes without artifice, he is the pure utilitarian and shows it in every paragraph.

If we can trust the evidence of his workmanship, none would have been quicker to recognize this than he. His careful revision and re-grouping of his songs shows that he left nothing to chance, but devoted himself to his

slender art with a concentration that surprises us. Dismissing all his social and political contacts—and his contacts were rich even at this early date—he withdraws to his diminutive theatre, crossing and re-crossing and pirouetting on his lyrical tightrope till he can do it with his eyes shut. Twice in the course of these years—before he went to Paris—he attempted to extend his range, only to return again within his old limits. That he failed in his attempt to write tragedy is neither surprising nor interesting. What does surprise us is that he failed prosodically as well, writing blank verse of an almost unexampled monotony and giving no indication here of his metrical sensitiveness.

The second experiment is less simple. At the end of the *Buch der Lieder*, Heine with a great gesture breaks into free verse and writes sea-poetry—his famous *Nordsee* cycle—as if to announce that he has done with quatrains and will write them no more, though, as the years were to show, it was not long before he crept back under their shelter and stayed there. The effect is very much that of growing a beard and shaving it off again. Heine does exciting things in this new vein. He has the whole watery element to himself, for no German writer before him had successfully exploited it, and he tumbles about in it with great gusto—the poet-porpoise of the German Ocean. Now and then he excels himself and strikes off a truly Homeric epithet: "Our ship speeds across the treacherous stillness,"

> Über die stillverderbliche Fläche
> Eilet das Schiff,

and almost persuades us that he has it in him to be a sonorous, masculine poet with myths and epics up his sleeve. Yet these verses leave us uneasy in the end. If we are to look for flagrant rhetoric in Heine's poetry

or for crude anti-climaxes, coming, not subtly as in the songs, but with a beery guffaw, like the notorious *Doktor, sind Sie des Teufels?* we must look for them here. These poems may suggest at moments a Heine rising above his flippant self into those nobler regions inhabited by Schiller and others, but they also show us a Heine furthest removed—as a lyrical poet—from the sphere of his peculiar genius. It was a sound instinct in him that made him go back on his tracks.

In Heine's second period—the period in which he lived and moved in Paris, not yet bed-ridden—there is an evident disintegration, amply shown in the miscellaneous collection, called *Neue Gedichte*, of 1844. A certain disintegration was inevitable. He had gone as far as he could in pure song; the wonder is that he did not weary sooner and that he was still able now and then to recapture his old magic in this outworked vein. He had no choice now but to stop writing verses altogether—there must have been long periods in these active years when he wrote none—or to venture into new territory. To say that he made the transition from love-poetry to political poetry is not enough—though his political verses, often brilliantly destructive and by no means obsolete to-day, belong chiefly to these years. What is significant is that his political poetry, unlike that of the *Tendenzdichter* whom he lashed so mercilessly, is, for him, personal poetry, not springing straight out of political ideas or directed towards political action, but dealing with his own inner and outer experiences. His longest piece of so-called political poetry, *Deutschland, ein Wintermärchen*, is quite as memorable for his whimsical visit to his old mother at Hamburg as for his gibes at the Zollverein, while *Atta Troll*—admittedly more complex in theme—beginning as a quasi-political satire, leads up to

his intensely personal and racial vision of Herodias the Jewess—"For it is you I love, more than Greek goddess or Northern fay,"

> Denn ich liebe dich am meisten!
> Mehr als jene Griechengöttin,
> Mehr als jene Fee des Nordens,
> Lieb' ich dich, du tote Jüdin!

There is no need to labour the point. In writing political poetry capriciously—so capriciously that he has been the despair of his interpreters—Heine was consistently doing something else. Having carried his restricted love-poetry to the limit and schooled, perhaps also exhausted, himself in the technique of poetry kept and manipulated in a water-tight compartment, he now begins—however tentatively, aimlessly, unconsciously—to admit his life, his richer life, into his poetry, to put himself genuinely into it.

For the student of Heine's poetry, this is the constructive approach to these middle years. Whatever lapses and offences and empty repetitions we may find, there is no doubt about the growth. Heine is changing perceptibly from one extreme to the other, from a very faintly autobiographical poet to one incorrigibly autobiographical. If it were merely a question of outward changes, the point would not be worth making; a synopsis of contents would do. It is the inner life that matters.

As it happens, we have virtually the same poem written twice, once for the *Buch der Lieder*, once for the *Neue Gedichte*. The theme is nearly that of *Tannhäuser* and the early version of it is no other than the pretty poem called *Die Ilse*, familiar to readers of the *Harzreise*. The water-fairy invites the wanderer to live with her in her magic castle under the waves, as Emperor Heinrich

did: "I shall hold you in my arms as I held the Emperor. I put my fingers in his ears when the trumpet rang."

Doch dich soll mein Arm umschlingen,
Wie er Kaiser Heinrich umschlang;—
Ich hielt ihm zu die Ohren,
Wenn die Trompet' erklang.

This is at best a graceful poem; there are no deeper accents in it. It is an invitation with a hint of crisis, no more. Heine scarcely knew the castle, and if he had known it he would scarcely have got the weight of the fact into his verses at this early date. When he took up the theme again in *König Harald Harfagar*, the situation was different. He had the worst of the Mathilde experience behind him and we know from his own confession how it had possessed and fettered him; moreover, his art was changing and letting experience speak. King Harald dwells at the bottom of the sea with his fairy mistress, while the years come and go and he himself grows old and withered: "Sometimes when the storms rage overhead and shake his palace of glass, he is suddenly wakened out of his trance. Sometimes he can almost hear his Normans calling in the wind, and he raises his hands joyfully—and lets them fall again. Sometimes he even seems to hear the sailors far overhead praising King Harald in heroic song. And then the King groans and weeps, but quickly the fairy bends over him and kisses him with a laugh."

Manchmal aus seinem Liebestraum
Wird er plötzlich aufgeschüttert,
Denn droben stürmt so wild die Flut
Und das gläserne Schloss erzittert.

Manchmal ist ihm, als hört' er im Wind
Normannenruf erschallen;
Er hebt die Arme mit freudiger Hast,
Lässt traurig sie wieder fallen.

Manchmal ist ihm, als hört' er gar,
Wie die Schiffer singen hier oben
Und den König Harald Harfagar
Im Heldenliede loben.

Der König stöhnt und schluchzt und weint
Alsdann aus Herzensgrunde.
Schnell beugt sich hinab die Wasserfee
Und küsst ihn mit lachendem Munde.

This tells us what was going on in Heine's poetry during these middle years, when poetry meant less to him than at any other time of life, yet was strong enough not to die out altogether. There is no second example quite as satisfying as this one—it would be too much to expect another like it—but there are plenty of sorts. They must not usually be looked for among his songs. In order to write in this new way, he had to put his songs behind him. It is in his romances and his looser, more casual poems—his two or three poems to Germany, for instance, or his rendering of the *Tannhäuser* legend—that they will be found. The elusive presence of this deeper note makes the study of Heine in this—his uncertain—period curiously fascinating. Often it can be felt when it cannot be labelled, for example, in *Die Beschwörung* where Heine again attempts an old theme—the spectral woman of his early *Traumbilder*. This time the monk summons her, Faust-like, with his magic book, and she appears "a poor wraith of beauty in her white shroud. Her gaze is sad, the bitter sighs rise from her cold breast. The dead woman sits by the monk. They look at each other in silence."

Er spricht das grause Beschwörungswort,
Da wird sein Wunsch erfüllet,
Die arme verstorbene Schönheit kommt,
In weissen Laken gehüllet.

Ihr Blick ist traurig. Aus kalter Brust
Die schmerzlichen Seufzer steigen.
Die Tote setzt sich zu dem Mönch,
Sie schauen sich an und schweigen.

The gain here is more than technical—though Heine has obviously learned something in the art of reticence—there is experience too, not less palpable for being baffling and secret.

Whether in the ordinary way of life Heine would have consolidated his new position in poetry must remain a matter of conjecture. In the sense in which the *Lyrisches Intermezzo* consolidated his earlier manner, there is no real consolidation here. His poetry begins to be commensurate with his life, but all is tentative. *Atta Troll* comes nearest to being more than tentative, without—from this point of view—quite succeeding, perhaps because Heine is performing again. Just as the work is a *tour-de-force* metrically—rhymeless stanzas *ad infinitum*, each one as self-contained as if it were rhymed—so too in content. The persistent effort to be clever—the necessity of being clever if the hazardous poem is not to fall flat—excludes, or tends to exclude, the more resonant chords that Heine was now capable of and produces a work more artificially personal than inherently so. It is as if Heine were employing the artfulness of his earlier poetry on a theme which called for the artlessness of his later. The companion poem, *Deutschland*, is among his most uneven productions. Searchingly personal and memorable at some points—for example, in the vision of the familiar spirit who carries into action what the poet writes, "I am the deed of your thought:"

ich bin
Die Tat von deinem Gedanken;

at other points it is merely crass and in Heine's least

defensible vein. Turn where we may in this period, the moments of self-revelation will be sporadic and capricious. One romance strikes the note, the next misses it.

And so it would probably have remained to the last, but for a catastrophe which in another might have put an end to all poetry, but in Heine brought poetry to a late fruition. From about 1848 on, the poet was confined to his bed, and there he stayed till the end and the release came in 1856. It is an old story how in this living death Heine fell back on poetry again, having lost virtually all else, "the dead hand of the poet setting down in the morning the sweet excesses and the mad spirit-revels of the night."

> Die schaurig süssen Orgia,
> Das nächtlich tolle Geistertreiben,
> Sucht des Poeten Leichenhand
> Manchmal am Morgen aufzuschreiben.

The outcome of these strange vigils is in the *Romanzero* volume of 1851 and in the still larger body of poems written after that date. It stands to reason that a poet, writing on these extraordinary terms, would either indulge in trivialities and self-repetitions—for the mere sake of writing and breaking the deadly monotony at all costs—or he would speak out of the depths of himself. No one has ever doubted for a moment which Heine did. It was only in the depths of himself that he found those ardent Jewish affiliations, announced in *Atta Troll* but not made eloquent and moving till the *Hebräische Melodien*, the third book of the *Romanzero*. Here, if anywhere in Heine, the soul of the man sings. Or was it the soul of the race in him? No matter. When he extols Jehuda Halevy, as he had never extolled any man before—unless we except his prose eulogy of Spinoza—he is betraying lost aspirations of his own, deeply buried under the *bric-à-brac*, seen

only in glimpses: "And Jehuda was more than a scholar, he was a master of poetry, a great poet, a star and a torch to his age, a light to his people, a singing column of fire before Israel's caravan in its desert of exile:"

Und Jehuda ben Halevy
Ward nicht bloss ein Schriftgelehrter,
Sondern auch der Dichtkunst Meister,
Sondern auch ein grosser Dichter.

Ja, er ward ein grosser Dichter,
Stern und Fackel seiner Zeit,
Seines Volkes Licht und Leuchte,
Eine wunderbare, grosse

Feuersäule des Gesanges,
Die der Schmerzenskarawane
Israels vorangezogen
In der Wüste des Exils.

Scarcely less deep is the pessimism which throws him time and again into sympathy with the beaten man—Harold's corpse on the battle-field of Hastings sought by a woman and two monks; Charles I in hiding, rocking a cradle; Boabdil, the Moorish king, passing into exile over a mountain-ridge—and sets him dreaming of a happy land where "under shadowy cypresses a river of healing water flows, Lethe its name, drink of it and you will forget your suffering,"

wo schaurig
Unter schattigen Zypressen
Fliesst ein Flüsslein, dessen Wasser
Gleichfalls wundertätig heilsam—

Lethe heisst das gute Wasser!
Trink daraus, und du vergisst
All dein Leiden—

and even turns him in his own eyes into the Lazarus of his Lazarus poems, picking crumbs of empty comfort at the gates of the world.

Since this was a pessimism convincing enough for Schopenhauer, the arch-pessimist, it ought to be enough for us, though it is fairly obvious that in Heine's case the pessimism was partly—not wholly—induced by appalling circumstances and that, if God would only set him on his feet again and let him walk in the sun, he was ready to be a thoroughgoing optimist tomorrow. But if we look more closely at this late poetry, we can find elements yet more personal—not ascribable to the submerging of himself in race or circumstance, like his Hebraism or his melancholy, but in the stricter sense individual, belonging to him and no other.

It will probably be agreed that, if Heine has matched his own *Lyrisches Intermezzo* for unity of vision and performance, it is in the group of romances or narrative poems, entitled *Historien* and constituting the first book of the *Romanzero*. The comparison invites itself and many must have made it. But sixty-five songs on the one hand, twenty-odd romances on the other—comparison is not simple, unless one sticks to negatives and contrasts, seeing formal perfection in the *Intermezzo* and an indifference to form in the *Historien*, a light key of colour as against a dark key, an emotional content as against an historical. And so on. None of which quite hits the target, though there is truth in all of it.

What distinguishes the *Intermezzo* among books of song is its patent theatricality—using this precarious word in a strictly impartial, and not at all in a moral, sense. Heine stages his lyrics as no other can; *The Shropshire Lad* is ingenuous beside it. One feels that each poem makes its bow, does its turn, and goes off, as in a vaudeville show. Indeed, the sense of vaudeville is never far from the text. The introductory *Prolog* is largely in terms of costume, music, and song. The knight

sits in a fairy's palace—the old theme again; a group of maidens—Heine doesn't say chorus-girls—play the cither and dance round him, till at last the lights—Heine doesn't say foot-lights—go out. And in the songs themselves this imagery of the theatre insinuates itself continually. In their dreams there is usually music, vocal and instrumental—*da singt es und da klingt es*. The very trees "sing in chorus" and the brooks are "like dance-tunes,"

> Wo alle Bäume sprechen
> Und singen, wie ein Chor,
> Und laute Quellen brechen
> Wie Tanzmusik hervor.

Or again, "the island of spirits lay dim in the moonlight, sweet sounds were there and the clouds danced,"

> Die Geisterinsel, die schöne,
> Lag dämmrig im Mondenglanz;
> Dort klangen liebe Töne,
> Und wogte der Nebeltanz.

In the later *Historien*, it is the same—with a difference. In *Rhampsenit*, that ironical anecdote which opens the series, the Egyptian princess dances in her grinning circle of handmaidens, eunuchs, and crocodiles—appropriately, though there is no real call for it. It is simply Heine's way of seeing Herodotus. Pomare, the courtesan, dances as the daughter of Herodias danced before Herod. (Here the dance imagery significantly touches the Jewish.) The god Apollo turns his lyre into a mandoline and sings a popular song about Parnassus with the nine Muses grouped round him. Later in the same poem, he reappears as precentor in an Amsterdam synagogue—a transition which aptly serves to connect the two litanies that are sung elsewhere in the *Historien*, one in an English abbey, another by ghosts in a nunnery at midnight, with

the more frivolous music. To continue, Jacob's daughters dance round the Golden Calf to kettle-drums, fiddles, flutes, and horns. Even Charles I has to sing a nursery rhyme. And, enlarging the variety stage to accommodate the pageant of history, there are at least five processions of one sort or another, two of them—a caravan and a funeral—meeting in a single poem. Also there are a couple of quieter turns—one performed by the headless ghosts of Marie Antoinette's ladies-in-waiting, who may be excused for not singing, and another by figures of lovers who step nightly out of their mediaeval tapestry and mutely or whisperingly converse. And, finally, there is a fancy-dress ball.

What has happened is now clear. The theatre imagery—all that we associate with vaudeville, circus, ballet, dance, orchestra, costume, chorus, pageant, masquerade, and such-like—has changed its position in Heine's mind. From being rather part of his technique than part of his vision, it has passed wholly into vision, letting the technique henceforth look after itself. Nowhere in the *Historien* do we get the impression that these poems are being staged for us; the staging is inside the poems now. But the stage impulse is there throughout. How easy to convict Heine's songs of a spurious artificiality which he later outgrew, and how far short of the truth! In one form or another, his theatrical mood was essential to his genius; he could not write without it. He did not outgrow it in his later poems; he only showed how deep-seated it was, how indispensable, how penetrating, how visionary.

It is unlikely that Heine knew how strong this bias was, how for him in very truth all the world was a stage and life a ballet. But, as his prose shows, he was not unconscious of it and would not have repudiated it. It is

significant that he wrote two ballets himself—one of them a Faust ballet with a female Mephistopheles—and that he regarded this as the coming form of drama. "We must stick to the ballet," he said to Heinrich Laube, who, in his account of the conversation, added the playwright's gloss that Heine's Muse was "a dramatic embryo, too lazy to develop." In his topical prose—most of his prose is topical—he is never weary of discussing humanity in costume, whether on the stage or off. A vaudeville or a masquerade—it is all one to him. See how his imagination is kindled by a church procession in Lucca or by carnival-time in Paris or Berlin. The extant fragment of his novel, *Der Rabbi von Bacharach*, takes us only into its third chapter, but there is a procession there, nevertheless.

Far from isolating itself as it is apt to do for others, this stage vision seemed to enlarge Heine's contact with life and even to act as a key to it. What could be further apart than the world of the ballet and the world of politics? Yet the one sets him talking about the other, as in that seemingly far-fetched passage in the *Harzreise*—he echoes it more than once in his later account of the Paris carnival—on "the diplomatic meaning of the ballet," in which he says that "there is more politics in Hoguet's feet than in Buchholz' head" and so spreads himself in this capricious thought as almost to become pedantic.

For most of us, this costumed imagery is artificial and in direct opposition to nature. But not for Heine, for he says in his Berlin letters that "it is only at a masquerade that people are really human." In Paris he speaks of "the secret masquerade that goes on everywhere," "the larger carnival which begins on January 1 and ends on December 31." And in another place—oddly enough, in his very unimportant study of Shakespeare's women—

he sees man and nature explicitly in these terms: "The whole history of mankind, which one is tempted to divide into plays, acts, and scenes, is one and the same. It is just a masked repetition of the same events and forces, an organic circuit, which always begins over again" (*eine nur maskierte Wiederkehr derselben Naturen und Ereignisse, ein organischer Kreislauf*). An organic masquerade! Further than that he could scarcely go. Unless he did so in his description—more poem than chronicle—of the cholera epidemic during the Paris carnival of 1832, where "discoloured and unshapely costumes were seen in mockery of the disease" and where "the dead were buried with such haste that they took their motley with them to the grave and lie there merrily."

In the last stage of all—post-*Romanzero*—these deeper associations of masque and nature bear strange fruit. Heine is writing now with a directness, a baldness, that few poets have reached. It is not the artful simplicity that he began with, it is the unforced simplicity of one who learned his art long ago and is content now to talk in his familiar verse, knowing that the art will be adequate without his fussing over it. And so we get poems like *Epilog*, *Der Scheidende*, *Mein Tag war heiter*, *Morphine*, in which he expresses his last clinging to life and his last rejection of it, according as his mood swings up or down. He says with one breath that it is better not to be born and with another that the worst life on earth is dearer to him than the best in the underworld, re-phrasing these words of Achilles, not once, but twice, as if to indicate that they were much in his mind. There is little colour left in his verses now. The sombre purples of his ballads have gone the way of his lyrical blues and pinks. He is the etcher now or the worker in wood-cut. No glittering carnivals or gay processions; the bright costumes are all

put away. Yet even here there is characteristic imagery, making the poems Heine's—there are costumes still, the animal costumes of one of the simplest forms of literature —the fable.

The fable had already made its formal entry into Heine's poetry with Atta Troll, the dancing bear, a notable member of Heine's menagerie, whose shaggy overcoat sits on him with so fantastic a sadness: "When he thinks of his youth and his lost kingdom of the woods he growls darkly and looks sinister like one of Freiligrath's blackamoors,"

> Denkt er seiner Jugendtage,
> Der verlornen Waldesherrschaft,
> Dann erbrummen dunkle Laute
> Aus der Seele Atta Trolls;
>
> Finster schaut er wie ein schwarzer
> Freiligräth'scher Mohrenfürst.

No need to look further for evidence that Heine's vaudeville and Heine's menagerie, if not one and the same, were accustomed to travel the road together. The external world is all a disguise—man's disguise or nature's disguise. A harlequin or a dancing-bear, what is the difference? For Heine merely this, that as his genius reduces itself to its plainest, its most elementary terms, he does not discard his instinctive imagery, but turns to the natural, the naked, costume instead of the domino or the cap and bells.

And so in the latest poems of all, there is animal imagery everywhere, not just in the little group of fables proper—the best of which, *Der tugendhafte Hund*, is among the best of all fables—but, more significantly for our purpose, in poems in which there is no attempt at fable and the fable imagery creeps in unawares. To say nothing of the more obvious instances—the philharmonic tom-

cats and what not—there are the flies that buzz over his bed: "Some of them seem to have human faces with elephants' trunks, like the Indian god, Ganesa,"

> Etwelche haben Menschengesichter,
> Auch Elefantenrüssel daran,
> Wie Gott Ganesa in Hindostan.

In the "castle of affront" the toad, the rat, and the viper whisper his calumnies in the grass. The very hours crawl by him like monsters: "These hours, days, eternities glide past like snails, giant snails with outstretched horns,"

> Stunden, Tage, Ewigkeiten
> Sind es, die wie Schnecken gleiten;
> Diese grauen Riesenschnecken
> Ihre Hörner weit ausrecken.

When he calls his wife the lamb whom he can no longer shield, he develops the picture with a curious literalness, and he reminds her on another occasion that there are worse beasts in Paris than the wolf or the shark. When Camille Selden appears, the strange visitant of his last days, she becomes his *Mouche*. And in the sarcophagus poem which he addresses to her—that pageant carved in stone, which seems to concentrate and ennoble the poetic vision of a life-time—these last images are assigned their niche with the rest. Here we see "sculptures, where man and animal are mixed, centaurs, sphinxes, satyrs, chimeras —from the mythical age." And along with the swan that was Jupiter and Diana with her dogs, there is Balaam's ass ready to stop the poem—to bring down the curtain—at the right moment, with his loud hee-haw.

It is all wonderfully coherent and satisfying. One would have said off-hand that the rats and mice that flit across Heine's poetry at the last were no more than the touch of delirium, the nightmare, that he trifled with in

the daylight, were it not that they can be seen to grow out of the earlier stages of his poetry and to round off his achievement. Thus mysteriously, grotesquely, do the minds of poets work. There is no organized philosophy in Heine, though there are some excellent snatches of comic mythology, best of all the passage in which he explains that God was short of money when he created the world and was compelled to borrow from the devil on mortgage, each thus having an interest in the continuance of things and neither daring to thwart the other too directly—a music-hall gem of the first water. No, there is no organized philosophy in Heine. But there is an imaginative way of seeing things, consistently held and matured, and not as light as it looks. It is only on the moral and intellectual plane that Heine seems so contradictory; his poetry, his vision, hangs together from the first word to the last.

And how much it explains! On the playful stage of his imagination, his flippancies and his poignancies, his artificialities, his inconsistencies, his indecencies, are all in place. They are orthodox in the true vaudeville tradition. We have no need of racial theories or Romantic schools to explain his fondness for Oriental colour—that too is in the tradition. If he goes to Paris and stays there notwithstanding his powerful bond with Germany, there may be instinctive, artistic reasons even for this. For he says incidentally—it matters not with what truth; enough, that he thought it: "The French are all born comedians. They can study any part and costume themselves so well for it, that it is a pleasure to see. The French are *les comédiens ordinaires du bon Dieu*. . . . In the life of the French as in their arts and letters the theatrical rules the day." No wonder he never left them —and is buried in Montmartre.

THE MONTAIGNE QUATER-CENTENARY

HERBERT L. STEWART

SAINTE-BEUVE once described Montaigne as "the wisest Frenchman that ever lived." The year just past was crowded with centenaries, but the place given to this one in the journalism of countries very different in culture and tradition shows a certain unique quality in the feeling it aroused. Has Sainte-Beuve's tribute been endorsed? What, in particular, suggested to him the epithet "wisest," and how far has later criticism justified it?

Wisdom is correlative—is it not?—to the life and problems of one's own time. It is shown in choosing an attitude to contemporary difficulties which, perhaps, no one can solve, but which some handle in practice less disastrously than others. At times it may be no more than a sagacious choice of the least among evils. It is something distinct from either heroic character or brilliant originality, and Montaigne was neither genius nor hero, as he himself often pointed out. Yet, for some cause, his figure has fascinated generation after generation, including many men whom hero and genius have bored, especially men conscious of their mediocrity—perhaps because he has shown how mediocrity itself has resources they had not suspected. Herein, I think, lies the aptness —at once striking and questionable—of Sainte-Beuve's epithet. I shall try to give reasons by a rapid survey of Montaigne's career.

I

In a sense, indeed, he had *no* career, and perhaps it was this very withdrawal from public activity which

showed his wisdom. He knew what a man of his type ought to avoid.

His father destined him for the profession of law, and as legal positions were so largely a matter of purchase, the Seigneur de Montaigne could give his son a most advantageous start. He was duly subjected to the requisite training, obtained formal qualification, and was given a place in the Court of Aids of Perigueux. Such was the scandalous procedure of the time that in his twenty-fifth year he found himself on the Bench of the Supreme Court of Justice. But it was wholly against his will. Montaigne used to say that his knowledge of jurisprudence was merely that such a study existed, and he admired the wisdom of the King of Spain in excluding all lawyers and students of law from the Spanish colonies, lest the discords of the Old World should be reproduced in the New.[1] The violence of his language on this point is partly explicable by the peculiar nature of the trials in which, from time to time, he must have been called upon to act. It chanced that the years of Montaigne's judicial office were those of fiercest conflict between the French monarchy and the Huguenots; he retired just two years before the St. Bartholomew massacre. The records of the *Parlement* of Bordeaux for this period are strewn with savage edicts of persecution, and we can guess how these must have been regarded by the author of the *Essais*. Scornful as he was of the Reformation movement,[2] Montaigne's master passion was hatred of cruelty. But what availed his solitary protest on the Bench? It is not strange that he has left no memorandum of any particular horror in which he may have been officially and compulsorily involved. The death of his two older brothers

[1] *Essays*, Florio's translation, Everyman edition, III, p. 324. (References throughout are to this edition.)
[2] I, p. 313.

brought him, unexpectedly, in 1570 the inheritance of the family estates, so that he was able to escape from the work he despised to a leisure for thought and study. Among the most familiar of literary inscriptions are the lines on the walls of his château, in which, when no more than thirty-seven years old, he recorded his most welcome *hejira*.

So began his rural retirement, suspended once when in 1582 he was prevailed upon, with very hard persuasion, to accept the mayoralty of Bordeaux, and occasionally interrupted for a journey to his publisher in Paris, or for a holiday trip in Germany, in Italy, or in Switzerland. What of the social obligations of *noblesse*? Montaigne was never a rich man; not only had he little to spare for anyone else, but he felt that his own establishment was necessarily rather mean, and his travelling had to be strictly limited by cost. He complied, however, with a custom which had of late established itself, that on taking up his inheritance a *seigneur* should be presented to his sovereign. So Montaigne reported himself at court—the strange court of Charles IX. He there even became "gentleman-in-ordinary of the bed-chamber," but the duties of the office thus indicated have so far eluded the research of antiquaries. A legend was long current that he was appointed secretary to the Queen Dowager. Words fail one to depict the paradox of a situation in which, say during August, 1572, the letters of Catherine de Medicis were dictated to Michel de Montaigne! But the legend has been altogether discredited by the discovery of a Jacques de Montaigne who held that most questionable of posts.

What deterred Montaigne, or at least what he thought deterred him, from an active career of any kind, either legal or political, was not so much the desire for leisure as

a sensitive conscience. He was no recluse; he loved human contacts, could enjoy nothing fully unless he could share it, and extolled the educative value of travel. But he writes that "innocencie it selfe could not in these times nor negotiate without dissimulation nor trafficke without lying."[3] The chief report he has to make upon his thirteen years in the *Parlement* of Bordeaux is that he had watched his fellow-judges too long to retain any belief in their integrity.[4] He knew that in politics a man is expected to cheat for the commonwealth just as a soldier must be ready to die for it, but he did not choose to be among those patriots who can sacrifice honour as willingly as life.[5] In an outburst of austere virtue, Montaigne once declared that no man should be untrue to his word even if it were a promise of payment to thieves who were holding him for ransom.[6] It scarcely needs a Machiavellian to question so stern an imperative as that; at all events it is superfluous to explain further why such a rigorist withdrew from politics in the France of Catherine de Medicis. Sometimes, too, it occurred to Montaigne that his talent, as well as his conscience, might prove to be of the wrong sort for public life. As he once observed, a man may be good at composing essays, but not at working effects.

Putting together data scattered through his writings, we can construct a tolerable outline of his person in rural retirement. In physique, he was below the middle height,[7] with a thick reddish moustache,[8] a harsh voice,[9] a hand too stiff to write legibly,[10] and eyes so easily tired

[3] III, p. 18.
[4] *Loc. cit.*
[5] *Loc. cit.*
[6] III, p. 20.
[7] II, p. 365.
[8] I, p. 356.
[9] II, p. 367.
[10] *Loc. cit.*

that most of his books had to be read aloud to him by others.[11] A man notable for his incapacities, living on a country estate which filial devotion led him to preserve as his father had left it,[12] but himself so unobservant as scarcely to know a cabbage from a lettuce, to recognize the commonest farming operations, or to distinguish all the current French coins, and with a memory so fickle as to be unable to call his servants by name.[13] Someone suggested that this was mere affectation; but Montaigne became very resentful, protesting that his defects were perfectly genuine[14]—for instance, that it was a distress to him to be unable to address an audience without committing his speech to memory, especially because his memory was so hard to store and so given to leakage.[15] People reproached him for coldness and aloofness; he acknowledged that he was, indeed, extremely lazy, but thought he was at least mild of manner, preferring to acquiesce rather than to quarrel, and if not very anxious to be popular, at all events planning not to be hated.[16] One is not surprised by his occasional failure. His method, he says, was to "speak conformably to the common insipience,"[17] and perhaps he allowed his method to be too obvious.

II

The first two books of the *Essais* appeared in 1580, the third and last in 1588. They are rich in suggestiveness for contemporary circumstances and manners. Spiritually, no man was a plainer product of the Renaissance; but Montaigne was of the Renaissance neither in the

[11] II, p. 378.
[12] III, p. 191.
[13] II, p. 377.
[14] III, p. 190.
[15] II, p. 375.
[16] III, p. 40.
[17] III, p. 39.

excitement of its dawn nor in the quiet confidence of its noonday; rather in the sober disillusionment of its decline. He could remember how his father had been aflame with its promise, how the wandering scholars had been sought after and entertained at the château of Montaigne like saints of the Middle Ages, how each word that fell from their lips had been heard as an oracle.[1] For his own part, he still loved those wandering scholars, but with a love that fell short of worship. The novelty had passed off, and the New Learning had not fulfilled its promise. "Schoolmaster" had become a term of reproach, as the term "scholar" and—by association—the very name of "Greek" had been in the Rome of Plutarch's day. Montaigne records a conversation he had with a reflective lady, who explained to him that this reproach was just, because people had seen to their disappointment that knowledge comes but wisdom lingers. It seemed to this lady that there was a reason why that old adage must always be corroborated; was not the space in one's mind limited, so that the native product is quickly cramped and crushed under a weight of imports? The metaphor from a warehouse did not commend itself to Montaigne, and he suggested instead that perhaps the mind overfed with facts is like a plant choked with too much moisture, or a lamp dimmed with too much oil. And yet, he adds, this is but a surface resemblance, for the more the mind is replenished, the more it stretches.[2] A change he notes from the days of his own boyhood is that the romances of chivalry have displaced Latin literature! Those romances, at the very time he was writing of them, may well have begun to occupy the satiric genius of Cervantes. They roused our essayist to an exceptional explosion: "Of such idle, time-consuming and wit-besotting trash

[1] II, p. 126.
[2] I, pp. 134-5.

of bookes," he writes, "wherein youth doth commonly ammuse it selfe, I was not so much as acquainted with their names, and to this day know not their bodies nor what they contain."[3]

But the Renaissance, whose spirit he thus watched, somewhat sadly, in its decline, was a movement whose fascination for him had at its best been more intense than extended—perhaps, indeed, limited from the first to one of its many sides. For its scientific progress, for example, he had cared not at all—no more than Erasmus. He mentions a recent reform of the calendar, shortening the French year by ten days, that scientists might keep human reckoning in correspondence with the sun: what conceivable difference, Montaigne asks, has this made, or can it ever make, to man's lot? He understood that Copernicus had shown the earth to move round the sun, whereas previous astronomers had thought the sun moved round the earth; but why, in heaven's name, should anyone care?[4] A thousand years later, both views might well be discredited in favour of some yet undreamed of third. Montaigne was fond of travelling in Italy, the first home of the Renaissance; but if he knew anything of the appearance from the printing-presses of Padua of the great work *On the Structure of the Human Body*, almost contemporaneous with the work of Copernicus, and laying the foundation for all future anatomy no less than the treatise *On the Revolutions of the Heavenly Bodies* laid the basis for future astronomy, he makes no mention of it at all. He has many a reference to Galen and Hippocrates, but none to the great contemporary trio, Vesalius, Eustachius, and Fallopius. Once he quotes with approval what Scripture says of curiosity, that it

[3] I, p. 187.
[4] II, p. 285.

was laid upon our race for a scourge.[5] And of the prevalent desire to explore causation he remarks that knowledge of causes concerns only him who hath the conduct of things, "not us who have but the sufferance of them."[6]

Nor had he more than the mildest interest in the Renaissance exploration of the globe. He knew that the achievement of Columbus had been quickly followed by those of Cortes and Pizarro, both of whom had lived into his own time, and that within the previous half-century a new world had been discovered as large and as populous as the old. But what this chiefly suggested to him was the pity that such a chance had not fallen to some humane and cultured general of classical times; to Alexander, for example, by whom the native peoples would have been "polished, reformed and incivilised,"[7] rather than to those treacherous Christian Spaniards whose name had been made a synonym for barbarity and greed. On the other hand, unaffected as he was by the stimulants of advancing science and widening exploration, Montaigne had limitless intellectual eagerness in a different field. In his own words, he was pestered with the importunity of his mind.[8] It was an importunity forever at work, not upon cosmic mysteries, but upon human values. Montaigne was a humanist as Socrates was a humanist, disregarding mere physical speculations, turning away from Copernicus as Socrates from Anaxagoras, bringing back the motto Γνῶθι σεαυτόν as the very sum of wisdom. The two men were separated in time by two millennia, millennia which had seen such transformations as the rise and fall of the Roman Empire, the birth and diffusion of the Christian Church, the development of papal power, the

[5] II, p. 359.
[6] III, p. 278.
[7] III, p. 144.
[8] III, p. 38.

growth of feudal society. But in Montaigne it is the Socratic revival which so dominates as to make one doubt whether he reflected any of the intervening influences at all. What other analogue can come to mind as we hear him posing his problems in conduct, citing tentative definitions, marshalling illustrative cases, and concluding somewhat mournfully that it is very hard to be sure? Is there not even a parallel to his emphatic acquiescence in the discipline of the Catholic Church when we recall those last words: "Crito, I owe a cock to Aesculapius; do not omit to pay the debt"?

The parallel is, indeed, far from complete. A Socratic spirit, but by no means the Socratic depth or power, had appeared again. Montaigne was no creative thinker, and it was by no means merely the accident of better early training in Latin than in Greek which made him seek his philosophy in Seneca and even in Cicero rather than in Aristotle or Plato. He was little addicted, he says, to Greek books,[9] and it is suggestive that among those he read—in a French translation—his outstanding favourite was Plutarch. Passage after passage of his own ethical or social analysis, which delights one both by acuteness of thought and by felicity of expression, stops short at just the tantalizing point. One feels how the Platonic Socrates would have shown that the problem was not yet solved, but rather effectively opened, and that the real work must now begin. As we turn the leaf in Montaigne, however, the next page proves to be about something quite different. Not like the *Gorgias* or the *Theaetetus*; rather like Cicero's *Tusculans* or Plutarch's *Opera Moralia*. No doubt all such inquiries are inconclusive, but some stop the search a little before they need to stop. Dialectically, we must all die in some ditch, but the last ditch is preferable to the

[9]II, p. 95; *cf.* II, pp. 115 *et seq.*

second or third. And is it not this preference which separates him who is a philosopher from him who is not?

Montaigne's relation to classical authors finds, perhaps, its closest parallel in a Puritan's relation to the Bible. Latin was the language which he learned as a child before he learned French, and on which he continued to depend for special clearness and accuracy. From Latin authors he constantly borrowed phrases and maxims, terse epigram, subtle analysis, or exquisite metaphor, to convey his own deepest reflections on life. Even forty years after he had ceased conversing in it, Latin would come first to his lips in a moment of excitement.[10] One thinks of the first Book which Puritan children were taught to read extensively, the only great literature with which most of them would ever be familiar, their continual resort in exigencies of conduct, their unfailing source of expression at an emotional crisis. Plutarch and Seneca, Montaigne once said, were the fountains from which, like the Danaides, he drew all his water.[11] If they were to him what Isaiah and St. Paul were to a Puritan, is not this, indeed, the renaissance of a distant past?

A slight but suggestive token of the same kind is in his recurring allusions to suicide. His mind dwelt much on death, of which he spoke like a Stoic, hoping that when it came it would find him at his customary tasks, perhaps setting his cabbages, and careless of death's dart, but not of his defective garden.[12] Whether the dart should always be awaited, or may in certain circumstances be solicited, is a question Montaigne has met by citing with apparent approval those classical writers who deprecate the preservation of life at the cost of accompanying ignominy,[13] and the old dictum that a wise man liveth as long as he

[10] III, p. 30.
[11] I, p. 149.
[12] I, p. 83.
[13] I, p. 232.

ought, not as long as he can.[14] The time for surrendering life, he elsewhere remarks, is fixed, like the date of a note's maturing, and the troubles of old age are the usury which nature exacts for an account long over-due.

III

The aspect of Montaigne on which it is most usual to dwell is his philosophical scepticism, shown by his pictures of the variety of human judgment and the inconstancy of human action. A mere statement of anyone's definite belief rouses him to show not merely how other thinkers have contradicted it, but how the same thinker has elsewhere said or implied what is inconsistent with it. Hardly has he characterized a man by his prevailing disposition when he qualifies this by explaining how the same acts may be looked at from a different point of view, so that a quite contrary disposition will appear to prevail. One might say that mankind's changefulness is his favourite topic, and that his favourite thesis is the vanity of all argument because opinions can never be settled, together with the folly of praise or blame because character can never become fixed. He draws here, indeed, a most opportune moral of toleration. A man, he observes, who will burn another for an opinion must surely have amazing confidence in his own judgment. By the way, it was Rabelais who said that first; but—as Montaigne elsewhere genially remarks—if a dictum is true and apposite, the man who coined it has no right to inhibit posterity from its use.[1]

There is much more, however, than this obvious upshot of the scepticism in the *Essais*. Those numerous critics who are content to leave it so, must have over-

[14] II, p. 27.
[1] I, p. 157.

looked a group of passages which tell not only a story very different, but a story in the light of which other passages acquire a new sense. Montaigne defines truth as intellectual coincidence with the custom of one's community;[2] but, unlike the philosophers from Plato down who have thought this a depressing conclusion, and hence have struggled to disprove it, Montaigne is not depressed by it at all. What he infers from the collapse of reasoning is the wisdom of those, plainly the great majority, to whom a method very different from reasoning has supplied both rules of life and ultimate beliefs. Nature had equipped the animal world with instinct, and was it credible that man had been overlooked?[3] Instinctively, all but intellectual eccentrics were content to rest upon tradition. Instead of attempting to alter the way of the world, they allowed the way of the world to manage them, without further inquiry.[4] Protestant Reformers might continue to extol a private judgment which their half-century of discords with one another showed to have been serving them so ill; but what enabled the Catholic in perfect repose to lay his head upon the pillow of intellectual doubt was his recognition of a will of God far above "these humane and vaine contestations."[5]

A passage in the first volume of the *Essais* here reads like a philosophic note by a devout layman to the Decrees of Trent, which had so lately been issued. Montaigne is shocked that the Mysteries of the Faith should have become material for common wrangling, and he feels that the rendering of the Sacred Books into the vernacular of different countries is but a provocative to further profanation by the vulgar.[6] He reminds us that Jews and

[2] I, p. 219.
[3] II, p. 146.
[4] II, p. 208.
[5] II, p. 26.
[6] I p. 362.

Mohammedans had shown more wisdom in suffering no such translations from the Hebrew or the Arabic, and he would advise the teachers of logic and grammar to find some source other than the vocabulary of religion for the illustrative examples they need. It would also be well, he thinks, to exclude religious topics from the theatre.[7] For his own part, Montaigne in his consciousness of personal inability and his sense of dialectical difficulties had managed, despite the temper of debate in which he lived, to keep his hold on the ancient beliefs[8]—"the Catholike, Apostolike and Romane Church, wherein I was borne, and out of which I purpose not to die."[9] It was within these limits that he desired every speculation he had put forward to be understood: "human fantasies and mine owne; what I discourse according to myself, not what I believe according to God."[10]

It is, no doubt, possible to interpret these passages as subtle and sustained irony, or as a precaution against personal risk. My reason for declining to regard them so is threefold: first, because they exhibit an attitude of mind which may be, and often has been, quite sincere; second, because if Montaigne had been sincere in it, one can scarcely see how he could have used plainer language; and thirdly, because the hypothesis of precaution or irony is very late, and does not seem to have been entertained by one so competent, and also so critical of him, as Blaise Pascal half a century after his death.

Great significance belongs here to Montaigne's remarkable conception of "nature." Ready as he was to criticize and mock the varying details of human belief or practice, he was convinced that fundamentally the growth of civilization had been sound, not because men had been

[7] I, p. 364.
[8] II, p. 285.
[9] I, p. 358.
[10] I, pp. 364-5.

clever enough to contrive it so, but because of the cosmic process which had mankind in charge. I wonder whether Shakespeare, who is known to have read Florio's translation of the *Essais*, had some paragraph of this sort in mind when he wrote those lines of *Hamlet* in praise of "rashness"—the indiscretion which sometimes serves a man better than deep plotting, and betokens a Divinity that shapes our ends, rough-hew them how we will.

Here is the source of Montaigne's ever-recurring optimism: sceptic as he was intellectually, he remains an optimist because he thinks he can see how intellectual inadequacies in the past have always been supplemented. Thus he often surprises us with some word of deference for established usage, for an established institution, and some word of contempt for radicals who would change the state or reformers who would re-create the church. To philosophy he assigns a twofold purpose: it should clear up confusions in average thinking, and it should also prescribe a limit beyond which even the most skilful thinking cannot pass. If it begins by promising to rid us of puzzles, it has to end by confronting us with a puzzle deeper than we had dreamed of. This is the point of many a striking paragraph, such as the one in which Montaigne contrasts the lower with the higher ignorance,[11] or the one in which he agrees with Plato's Callicles, that philosophy is a good thing *provided it is taken with moderation*.[12] Is this salaam of preference for stupid things which have grown old over stupid things which are new, to be regarded as a mere device to make agnosticism still deeper? It may be so. But it seems to me difficult to accept the theory[13] that Pascal's deference to Montaigne was due either to his being wholly in the dark about what

[11] I, pp. 353-4.
[12] I, p. 211.
[13] *Times Literary Supplement* (London), March 16, 1933, p. 173.

Montaigne meant, or to a fascination merely of horror felt by a devout churchman for a daring agnostic. I cannot do such violence to what appears the plain sense of passage after passage in the *Essais* and in the *Pensées*. Once more I think we see the besetting sin of criticism—that of forcing a great writer of the past to serve as mirror for the critic's own opinions.

Sometimes, indeed, it was hard enough for Montaigne to rest upon his reassuring conservatism. In the field of medicine, for example, he had heard of "a start-up fellow whom they call Paracelsus"[14] branding the traditional doctors with their traditional methods as likelier to kill than to cure. He thought this might well be true of them; all the same, he was not prepared to risk his life on the "new-fangled" speculation. More surprising, in view of his language elsewhere, is the sudden confidence he displays in legal procedure, once he has satisfied himself that law is a natural growth. A man in making his will, he thinks, should not exercise private judgment, which is likely to be capricious, but should bear in mind that the wisdom of the state is higher than that of the individual, and should thus take as his pattern what the statute provides for cases of intestacy.[15] The simplest method, one might infer, would be to refrain from making a will at all, and so let the law—which here becomes the same as nature—take its course. Such speculations, compared with Montaigne's earlier work, illustrate best of all, because they do so without his intending it, his own central contention about the inconstancy of human judgment.

What he enjoys perhaps most is to reflect upon the essential justice of nature as shown in the amplitude of life's compensations. Disappointment, he thought, was

[14]II, p. 286.
[15]II, p. 81.

by no means the inevitable fate of man, for it depended more on inner mood than on outer event, and the mood could be modified. His ambitious friends, for example, were unhappy by reason of unfulfilled social aspiration; but for himself, "enured to a mean calling," with a humour to which the very mediocrity of his fortune so well corresponded, it was most congenial at a public ceremony neither as an unknown man to have to fight for admittance with the usher at the door, nor as a grandee to have a lane opened that he might pass through a gaping and adoring throng.[16] Here as elsewhere Montaigne liked a middle course, and he was satisfied that, in general, men get their deserts far more nearly than they suppose. Knowing his own powers to be of very moderate compass, he felt himself also endowed with wisdom's most precious gift, the habit of squaring one's desires with one's powers.[17] On the whole, the scheme of the universe contented him;[18] and though born in a depraved age, he could console himself with the reflection that at such a time repute for virtue is all the more cheaply obtained.[19] So neither deploring what was past nor dreading what was to come, if he had his life to live again he would order it as he had ordered it already.[20]

To defend the equity of nature's distribution of happiness is hard enough; but it is still harder to vindicate her profound and complete wisdom in apportioning human qualities. Montaigne, though he does not undertake to justify whatever is actual, will go a long distance in apologizing for what most men blame. Like Henry V, he thinks there is some soul of goodness in things evil, would men observingly distil it out, and so he is at pains

[16]III, p. 152.
[17]III, p. 39.
[18]III, p. 34.
[19]II, p. 372.
[20]III, p. 36.

to show the touch of generosity by which many a vice is in part redeemed.[21] But he is careful not to overstate this obligation to be charitable. His mind was far too critical to be betrayed into cutting the basis from all criticism. Montaigne was not going to adopt a view of the human values which would forbid him to reprobate, for example, religious persecution, the *Parlement* of Bordeaux, or a Protestant reformer. So he is forced either to revise his criterion or to interpret "nature" in such a sense as will make these groups seem "unnatural." In most of his essays he elects for the second alternative. We find that the natural is the *average*, and that the fault of these blameworthy persons is their deviation from the average. But it at once occurs to him that there may be deviation either way; so we get the very bold inference that the popular hero no less than the popular scoundrel is a freak whose appearance is to be deplored. In a remarkable passage we are bidden to suspect all conduct which goes beyond the ordinary limit in either direction,[22] and again we hear of the profound value of that Scripture which says "Be not righteous overmuch."[23] Montaigne knew the faults of the ancient church, but thinks his father was most sagacious in seeing from the first how Lutheranism would do far more harm than good, because an unshaken authority is what most men need in religion, and he could wish that in his own time the incessant pamphleteering by Protestants—some of whom were able men—had been devoted to a better purpose. Perhaps if we could create a new world, we might with advantage create a different one, but—unlike Cadmus or Pyrrha—we are born into a world already arranged, and only at the

[21] II, p. 16.
[22] II, p. 24.
[23] I, pp. 210-1.

cost of breaking all can we wrest it from "the accustomed habit and fold it hath taken."[24]

Is it needful to tell us that such a man found his favourite authors in Plutarch and Seneca? Only at times does he rise to the heroic mood of his twenty-fifth Essay, setting forth the perfect contentment with which a philosopher should look out upon life—the serenity of countenance and temper, the reflected health of the body, the virtues which have ceased to be an effort or a burden. Seneca and Plutarch, too, had such exalted moments. But for them, as for Montaigne, what Gibbon called "sober discretion" commonly sufficed. What other voices from antiquity could stir so responsive a chord in the heart of one thus disillusioned, fretted by a world out of joint, with a shrunken estimate of what philosophy could do, and yet temperamentally anxious to make the most of such sources of encouragement as were still available?

IV

Here, then, I come back to the question with which I began: Is "wisdom" the special quality of Montaigne? Andrew Lang once said of him that he was "a man's writer, not a woman's," but immediately added "a tired man's, not a fresh man's." One remembers, too, that Macaulay, when beginning to break up after a lifetime of radiant health, said he felt like writing "a queer, Montaignish essay." What is the peculiar wisdom, or appearance of wisdom, or counterfeit of wisdom, that is a man's rather than a woman's, and especially a tired man's?

No doubt, for one thing, it is the ability to hold judgment in suspense where evidence is insufficient. Men, on the whole, seem to be less in an intellectual hurry. This

[24] III, p. 197.

virtue, too, increases rather suspiciously with increasing exhaustion; we know the growing dislike to make up one's mind. As we try to state the qualities Lang meant as appealing to a tired man, they do suggest a summary of the spirit of Montaigne. The tired man likes a sedative to enthusiasm. He welcomes a reassuring word that the world needs no drastic treatment, that the course of things will right itself, that eager reformers are rash people, probably self-conscious, and likely to do more harm than good; that, in any case, in the realm of ideas as elsewhere, there is nothing new under the sun. Thus alternately roused into a mordant cynicism and soothed into a universal tolerance, the tired man is a familiar spectacle. We all, says Lang, come to Montaigne, late indeed, but at last, and rest in his panelled library. No doubt we do. We have moods in which his charm is altogether fascinating, irresistible. But my question is whether this is wisdom, unless we mean by wisdom no more than a comfortable adaptability to our surroundings. Swift once defined a bench as a seat well bolstered and cushioned for the repose of old and gouty limbs. There is such a thing as an intellectual bench, that we all sooner or later enjoy and need, when we have reached the state described by Hamlet as "most weak hams." But is "wisdom" the right word for it?

One may say of the Montaigne way of thinking what Montaigne said of philosophy itself, that it is an excellent thing if not carried to excess. Perhaps one should add that it suits certain times, but by no means certain other times, and that the late sixteenth century had need of something quite different. I am not unmindful of the surpassing value of those appeals for a tolerant mind, those warnings against the superstition that issues in cruelty, addressed with such power to an age in which Geneva had

seen the burning of Servetus, Paris had seen the St. Bartholomew, and London habitually saw the examination of witnesses under torture—carried out at times by even so enlightened a judge as Lord Chancellor Bacon. But think of another aspect of the *Essais*. Montaigne was living in a period of eagerness, a period which had been thrilled by great events—the discoveries of a new continent, the Copernican astronomy, the birth of modern medicine, the religious Reformation, the whole turmoil of new ideas which inspired his brilliant younger contemporary to write the *Novum Organum*. Nothing remotely resembling the project of a *Novum Organum* occupied his thoughts in his arm-chair as he looked through the bay-windows on that "farre-reaching prospect." The reflections stirred in him were on the uselessness of exploration, the hollow and illusory character of scientific progress, the folly of attempting any reform in church or state, and the confidence with which the automatic course of things might always be awaited. This from one who included among his contemporaries Copernicus and Tycho Brahe, Drake and Raleigh and Frobisher, Vesalius and Eustachius, William the Silent and Elizabeth! Do we really believe, even after the festive commemoration of a quater-centenary, that the wisest Frenchman who ever lived can have been one so remote from the interests of his time, so undiscerning in estimate of its significance, so determined to take no share in its effort?

THE WHEAT PROBLEM

D. A. MacGibbon

THE wheat problem is one of the greater peaks in the vast mountain range of problems thrown up by the Great Depression. The mass of literature dealing with wheat that has accumulated during the last five years is almost as great as the wheat surplus. Wheat prices, wheat carry-overs, wheat-growers' distresses, methods of wheat-marketing, and kindred subjects, with the advent of the depression, quickly exacted attention from statesmen the world over. Many projects of state, such as stabilization boards, preference in tariffs, bonus distributions, import boards, quotas and embargoes, have been inaugurated, all aimed at coping with the difficulties of wheat-growers. Three international conferences have wrestled with the problem, and to the agreement signed last summer in London twenty-two nations attached their signatures—striking testimony to the world-wide importance of wheat.

In a short article it is quite impossible to review all phases of the wheat problem. A more useful service can be performed in endeavouring to lay bare its fundamental elements, to make clear the theories implicit in the solutions that are advocated or are being attempted, and, finally, to indicate the bearing of the world situation upon Canada and the Canadian wheat-grower.

The fundamental fact is that, in the summer of 1929, the trend of wheat prices turned sharply downwards and continued in that direction until about the end of 1932. On July 29, 1929, No. 1 Northern Manitoba wheat was quoted in store at Fort William at $1.78\frac{3}{8}$ per bushel. On December 16, 1932, the price for the same

grade in the same position reached the low level for all time of 39⅜ cents per bushel. These Canadian prices are taken as illustrative, for a similar downward trend occurred in the price of wheat in other countries on an export basis. In the United States and in some of the net deficiency countries of Europe, prices of wheat were bolstered in various ways to protect the national wheat-grower. But while this policy partially concealed the situation as indicated by domestic wheat prices, it did not really alter the basic facts.

It is true that, with the onset of the depression, prices of other commodities also fell to new lows, but the prices of the various fabricated articles that the wheat-grower must purchase did not fall so fast nor so far as did the price of wheat. For instance, in Canada the general index of wholesale prices, based on the year 1926 taken as 100, in December of 1932 was down to 64.0, while on the same basis the wheat-index was down to 28.3. Wholesale prices had registered a decline of thirty-six per cent., but prices of wheat had fallen by sixty-two per cent. Thus it has become a commonplace that the wheat-grower has had to contend not only with the repayment of debts and of interest upon debts contracted during the period of high prices, but that he has had also to face a widened discrepancy between the price-level of goods sold and goods purchased.

Explanations of this catastrophic fall in wheat prices have run chiefly upon two lines. There are those who hold that the present situation has been produced by the under-consumption of wheat and those who believe it is due to over-production. Both groups are equally positive that they are correct. Moreover, their disagreement about the cause of the evil naturally leads them to offer different solutions to remedy it.

Before analysing the nature of the theories of under-consumption and over-production, it is necessary to put the reader in possession of the facts that these theories seek to explain. To do so we must turn to statistics. It is difficult to keep these within limits, but the writer believes that the following tables,[1] helped out by some incidental comment, are sufficient to expose the problem in its main outlines.

I. Wheat Statistics

Between 1910 and 1914, the years immediately preceding the war, the average world production of wheat amounted in round numbers to approximately 3,800 million bushels annually (table I). Of what are now the four chief exporting countries, namely, Canada, the Argentine, Australia, and the United States, only the

Table I. World's Wheat Crop, 1910-4
(ex-Russia)
Production and Acreage in Millions

	World ex-Russia		Four Present Major Exporters[2]		Canada	
	Production	Acreage	Production	Acreage	Production	Acreage
1910	2,810.2	190.6	1,033.1	78.5	132.1	8.86
1911	3,044.4	199.7	1,090.0	85.1	230.9	11.10
1912	3,089.6	198.1	1,233.9	81.2	224.2	11.00
1913	3,100.7	199.8	1,203.1	86.8	231.7	10.02
1914	2,818.5	198.9	1,246.4	88.9	161.3	10.29

[1]The data for tables I and II are drawn from the compilations of the Food Research Institute. Table III appears in *The Wheat Situation, 1931* (Reports of the Imperial Economic Committee, 20th report, London, 1932). Table IV is also from the Food Research Institute, except for the crop-year 1932-3, which is based on recent announcements. Table V occurs in the *Monthly Review of the Wheat Situation* for August, published by the Dominion Bureau of Statistics.

[2]Canada, the Argentine, Australia, United States. Russian production varied from 563.5 million bushels in 1911 to 1,027.7 in 1913. Russian acreage was placed at 82.6 million acres in 1913.

last named between 1910 and 1914 occupied a high rank as a wheat-producer. Average annual production in the United States during the earlier period approximated 728 million bushels, with exports averaging 110 million bushels.

TABLE II. World's Wheat Crop, 1928-32
(ex-U.S.S.R.)
Production and Acreage in Millions

	World ex-U.S.S.R.		Four Major Exporters[3]		Canada	
	Production	Acreage	Production	Acreage	Production	Acreage
1928	3,905.0	240.5	2,001.6	121.0	566.7	24.12
1929	3,402.7	240.9	1,406.6	122.4	304.5	25.26
1930	3,663.5	246.0	1,724.0	125.4	420.7	24.90
1931	3,620.9	238.0	1,630.9	113.4	321.3	26.20
1932	3,619.4	243.6	1,590.7	117.8	428.5	27.18

Table II, by comparison with table I, reveals the estimated total increase in the world's wheat-production and acreage. Average world production has increased approximately to 4,500 million bushels annually, an increase of about 700 million. Table II indicates clearly the very rapid expansion in wheat acreage in Canada, the United States, the Argentine, and Australia as compared with the earlier period. It is interesting to note, so far as it can be determined, that even Russia shows an increased acreage over the pre-war period. The figures available are for the total Russian Empire for 1913 and for the total U.S.S.R. in 1931.

During the last twenty years dramatic changes have occurred in the channels of international trade with respect to wheat (table III). Russia and the Danubian

[3]Canada, the Argentine, Australia, United States. Russian production in 1930 estimated at 989.1 million bushels. No later figures available. Total U.S.S.R. acreage in 1931 is placed at 92.1 million acres.

TABLE III. Changes in the Trade in Wheat of Principal Exporting Countries

Order	Average of Crop-Years, 1909-14		Order	Average of Crop-Years, 1924-9	
	Net Exports in Millions of Bushels	Percentage Share		Net Exports in Millions of Bushels	Percentage Share
Russia	164.5	24.5	Canada	309.5	38.8
United States	110.0	16.4	United States	178.5	22.4
Danubian countries	109.0	16.2	The Argentine	154.6	19.4
Canada	95.6	14.2	Australia	96.6	12.1
The Argentine	84.7	12.6	Danubian countries	36.7	4.6
Australia	55.2	8.2	Russia	12.8	1.6
India	49.8	7.5	India	8.3	1.1
Chile	2.4	0.4			
	671.2	100		797.0	100

countries, at least for the time, are no longer in the forefront of exporting nations but have been replaced by Canada, the Argentine, and Australia. The United States has held second position during both periods. India now seems about to disappear from the export field.

End-of-the-year stocks, or carry-overs as they have come to be called, for the chief exporting countries (table IV) began to become significant in 1928. The steady rise of these stocks has been one of the most dis-

TABLE IV. End-of-Year Stocks in the Four Major Exporting Countries (In Millions of Bushels)

	Canada (August-July)	United States (July-June)	The Argentine (August-July)	Australia (August-July)	Total
1927-8	78	124	95	27	324
1928-9	104	242	130	27	503
1929-30	111	291	65	37	504
1930-1	134	319	80	46	579
1931-2	131	363	65	40	599
1932-3	219	386	42	36	683

turbing aspects of the situation. It should be pointed out, however, that some carry-over at the end of the crop-year is a normal feature of the grain trade. It is not to be desired or expected that at the end of the crop-year, just before or just as the new crop is to be harvested, all bins should be empty and there should be absolutely no stocks in hand. There is always some wheat carried over. Mr. Sanford Evans, of Winnipeg, long known as a student of wheat-statistics, has made a study of this aspect of the problem and estimates that the total working stocks in hand at the end of the crop-year for the four countries mentioned in table IV should amount to something over 200 million bushels annually.

As the world's acreage and production have increased, its import requirements have declined (table V). At

TABLE V. World Export Shipments

	(In Millions of Bushels)	
1927-8.....	793	
1928-9.....	928	
1929-30.....	613	
1930-1.....	788	
1931-2.....	770	
1932-3.....	615	
1933-4.....	552	(Broomhall's estimate)

the end of the last crop-year, Canada, the United States, Australia, and the Argentine between them had carry-overs greater in quantity to the estimated world import requirements for 1933-4. But on account of the short crop in the United States in 1933, placed at 499 million bushels as compared with an average annual production of 861 million during the period 1926-30, part of the surplus in the United States will be required for domestic use. The Canadian wheat-crop is also short and is currently estimated at 272 million bushels, as compared

with an average yearly crop of 408.5 million bushels for the period 1928-32.

On the other hand, Europe has been favoured with an excellent harvest. Both France and Italy have larger yields than Canada. In 1930 the importing countries of Europe produced 900 million bushels; this year the estimated production is 1,220 million bushels. Moreover, this wheat is reported to be of very high quality. In addition, France and Germany have sizeable surpluses carried over from 1932. Contradictory reports come from Russia, but it is generally stated that Russia has a better crop than in 1932. The large European crop accounts for the low estimate of the world's import requirements for the crop-year 1933-4.

With increased world acreage and increased world production, there have been built up accumulations of stocks of wheat greater than can be absorbed by current demands. This world surplus has overhung the market and produced a catastrophic fall in the price. The serious problem raised is how to reduce this world surplus to normal proportions and thereby to pave the way for an increase in the price of wheat.

II. The Theory of Under-Consumption

The answer to this question offered by the under-consumption theorists may be stated very briefly. Those who accept the view that the under-consumption of wheat is an adequate explanation for the situation just set forth statistically, hold that the piling-up of vast world surpluses of this commodity is essentially a symptom of world distress rather than a cause. In support of this view, they point out that the channels of international trade are choked by tariff walls, import quotas,

embargoes, and other ingenious forms of trade restriction. The instability of the foreign exchange is a further disability to international trade. Finally, there is the undeniable fact that great armies of unemployed subsist in misery in the great industrial countries of the world and that even where there is employment there has been an appreciable lowering of the standard of living as compared with that enjoyed previous to the Great War. Wheat-growers and wheat-exporting countries, they believe, are in the clutch of circumstances which have set the whole world awry, circumstances far more difficult to diagnose and cope with than mere over-production of wheat.

When confronted by the rapid increase in acreage devoted to wheat, with concurrent increases in production of wheat, under-consumption theorists argue that part of the increase in acreage at least can be justified by the growth in the world's population. The estimate for 1922 of the world's population is 1,646,000,000 and the estimate for 1932 is 1,849,500,000.[4] Beyond that, they contend that, even if it be granted that there has been some over-production, this situation would rapidly adjust itself were the state to cease interfering with the operations of the law of supply and demand. The under-consumption theorists believe that the recent efforts of the United States Farm Board and other governmental attempts to hold up, or to raise, wheat prices, which are in vogue almost everywhere, have undoubtedly delayed whatever reductions in acreage might prove necessary to bring supply and demand into proper price relationship. The wheat-growers have been readily led into continued over-production by hopes raised through

[4]Dominion Bureau of Statistics. The League of Nations' figures are higher, being 1,786,826,000 for 1913, and 2,024,500,000 for December, 1931.

governmental action. The position maintained is that as long as wheat-growing states continue to bolster the price of wheat artificially, just so long will the world have undue surpluses of wheat.

Holding these general views, the under-consumption theorists do not see any hope in a solution of the wheat problem that purports to settle it apart from the general settlement of international difficulties. In brief, thinkers of this school have in mind pre-war conditions of economic life before national antagonisms had become sharpened to the point where it became possible to inaugurate and maintain rigid policies of self-containment. Wheat-growers' difficulties to them are one of the fruits of the intensified nationalism which has followed the war. Until international channels of trade are re-opened, until foreign exchanges operate with their old-time smoothness, until people are willing to trade with one another, the plight of the grain-growers will continue to exist and will continue to perplex statesmen.

This point of view has close affinity with the "Peace-and-Plenty" policy of nineteenth-century liberalism. The policy of free trade was most influential in Europe when improvements in transportation were opening for exploitation one continent after another with, as a corollary, markets for European manufactured products widening rapidly. Growing industrial cities in western Europe considered cheap bread one of the necessities for maintaining the hordes of factory-workers that industry had called forth. There was a clearly defined drift of population to these cities, and as population increased net deficiencies in national food-supplies developed. The industrial cities were able to have duties on food-stuffs removed or reduced to a relatively low level. Amelioration to the pressure upon subsistence was also

afforded by emigration. In time, as costs of transportation fell, the agriculturists of western Europe felt severely the impact of trans-Atlantic competition, but for a period they were unable to check the forces representing industrialism.

The changes induced by these developments in the social organization of Europe were accepted with equanimity by the free-trade school both because they were in accord with the principle of the international division of labour and because they were accompanied by an advancing standard of living—their touchstone of economic progress.

The doctrine of national self-containment to the under-consumption theorists is an attempt to turn back the clock. They believe it is a fatal error to imagine that the western world, with its present population, its advances in the use of machinery, and its closely knit trade inter-relations, can be sustained on the standard of living reached before the war if it insists upon pursuing revamped eighteenth-century policies. In their view the situation can only be permanently ameliorated by reductions in tariffs bringing a resumption of the peaceful fruits of international trade. Thus the solution to the wheat problem that they offer is incidental to wide views of public policy and long-run considerations of public welfare.

III. The Theory of Over-Production

Those who hold to the view that there is an over-production of wheat, base their conclusion quite simply on the statistics of the situation. With the production of wheat increasing at a rate greater than population, over-production theorists claim that low prices have

served to induce neither the consumer to increase his use of wheat nor the producer to curtail its production. The war, they point out, produced an enormous expansion of acreage in the dominant exporting countries and the war was followed by an uneconomical stimulation of production in the importing countries. Even Great Britain, under a system of guaranteed prices, has been increasing her wheat acreage. These are the hard facts, and, they hold, it is quite unnecessary to go beyond them to explain the plight of the world's wheat-growers.

The conclusion which the over-production school draw is that acreage in wheat must be reduced, and since low prices have proved ineffective, it is argued that some form of control based on international agreement must be established. Just as the remedy proposed by the under-consumption group supports itself on classical economics, the idea of state-controlled production of wheat fits in with theories of planned economy that are now sweeping over the world. The new empiricism considers the older doctrines of free enterprise out-moded or obsolete. In this brave new world, delivered from the traditions of the past, planned economy and controlled economic activities, it is believed, will solve the problem of human betterment. The idea of economic control occupies the place once held by *laissez-faire*.

The basis of this atmospheric change in human thought lies much deeper than the present crisis. At the close of the nineteenth century, the increasing complications of modern economic life had led the state to assume wider functions of administrative control. The efforts of the warring states between 1914 and 1918 to marshall all their resources led to the organization of various war boards which came intimately into touch with the lives of the people and made them familiar

with a controlled economy. Under the Bolsheviks, state control was established absolutely in Russia. The Five Year Plan in recent years has been a sounding board to this idea. In Italy Mussolini appears to be succeeding with his corporative state. Recently the sharp spur of economic distress turned Germany to Hitlerism and the United States to the New Deal. Hence, in a general way, the world had become infiltrated with the idea that controlled economy is the most suitable method of solving economic difficulties. The inability of the World Economic Conference to make any progress in reducing tariffs or to take for the stabilizing of money any measures which would be in accord with the older theories of international trade, preceded the international wheat agreement. Had the World Economic Conference reached its avowed objectives in these directions, it is most unlikely that there would have followed the conference which concluded with the signing of the international wheat agreement.

IV. The Wheat Agreement

The international wheat agreement reflects recent international movements aiming at economic control; but it also owes much to two other factors: (1) the psychological "let down" or disappointment caused by the palpable failure, after such high hopes, of the World Economic Conference; and (2) the concrete domestic problem, caused by low prices of wheat, facing the governments of every country where considerable areas are devoted to producing wheat. The adjournment of the World Economic Conference left the wheat problem unsolved. It was natural, therefore, that some attempt should be made by the representatives of the countries

interested to ease the burden falling upon them. After strenuous negotiations the wheat agreement was signed—a product of the shape and pressure of events.

The difficulties surrounding the achievement of an international agreement affecting many countries are very great, and the urgency of the problem is measured by the unanimity achieved. In March, 1931, an international wheat conference was held at Rome, attended by forty-seven countries including all wheat-exporting countries except the United States. This conference came to the conclusion that it was impossible to make any recommendation for concerted action by governments for the compulsory restriction of production. By resolution it formally recognized that "the European countries, for manifold reasons, economical, social, or political," were "unable either to give up the cultivation of wheat or to allow it to be neglected."[5]

Subsequently, in May, 1931, in London, a conference of wheat-exporting countries, including the United States, was held. This conference also failed. It ultimately concluded that, although a large majority of the countries were in favour of concerted action for the control of wheat-exports during the season of 1931-2, unity was impossible. There was hope at that time that changed climatic conditions might enable the major exporting countries to dispose of the carry-overs accumulated from the large crops of 1927 and 1928; but since 1931 the situation has steadily grown worse (table IV), and by 1933 this hope was felt to be illusory.

The wheat agreement signed in London in August covers two crop-years, 1933-4 and 1934-5. On the assumption that world import demand for wheat during the present crop-year will amount to 560 million bushels,

[5] *The Wheat Situation, 1931*, p. 119.

the governments of Argentina, Australia, Canada, and the United States, taking into consideration the exports of other countries, agree to accept export maxima. The Danubian countries (Bulgaria, Hungary, Rumania, Yugoslavia) agree that their combined exports for the same period shall not exceed 50 million bushels with the understanding that the aggregate may be increased to a maximum of 54 million bushels if it be found that such a supplementary quota is required for the movement of the exportable surplus of the 1933 crop. The Russian government agrees to limit Russian exports for 1933-4 to a figure which shall be arrived at upon the completion of negotiations with the governments of the oversea wheat-exporting countries.

At the date when this article is being written, the individual quotas have not been announced officially but the amounts mentioned for the oversea countries are as follows: Canada, 200 millions; United States, 47 millions; Argentina, 110 millions; Australia, 105 millions.[6] Since a quota for the Danubian countries of 50 millions or possibly 54 millions is recognized by the agreement on the basis of import requirements of 560 million bushels, this would leave 44 or 48 million bushels to be exported by the U.S.S.R. If, however, the U.S.S.R. in the negotiations insists upon a larger quota and succeeds in enforcing its claim, then the quotas for the four oversea wheat-exporting countries will have to be cut down accordingly. On the other hand, should the basic estimate of 560 million bushels as the world's import requirements for 1933-4 prove to be too low, then there will be ground for an adjustment of their quotas upward.

For the crop-year of 1934-5 the four oversea wheat-exporting countries agree to limit their exports "to

[6]Secretary Wallace of the United States Department of Agriculture, August 30.

maximum figures of 15 per cent. less in the case of each country than the average outturn on the average acreage sown during this period 1931-3 inclusive after deducting normal domestic requirements." It has been estimated that this will give Canada in 1934-5 a quota of 263 million bushels or more for export and the United States 90 million bushels. In addition, it is provided further that "the difference between the effective world demand for wheat in the crop year 1934-5 and the quantity of new wheat from the 1934 crop available for export will be shared between Canada and the United States as a supplementary export allocation with a view to the proportionate reduction of their respective carry-overs." For 1934-5 the governments of the Danubian countries accept a quota of 50 million bushels and recognize that this allocation will not allow any extension of the acreage sown to wheat. Russia for 1934-5 as for 1933-4 agrees to negotiate on the quantity she will export. These provisions of the wheat agreement cover the commitments of the wheat-exporting countries.

The governments of the wheat-importing countries make no commitments looking to the reduction of their present expanded acreage but agree not to encourage any extension of area sown to wheat. They also agree to encourage the consumption of wheat and gradually to remove measures which tend to lower the quality of bread-stuffs. More specifically they agree that when the price of wheat imported into Great Britain reaches 63.02 gold cents per bushel (approximately 99 cents in Canadian currency at current rate of exchange),[7] that they will lower their custom tariffs on wheat and modify the general régime of quantitative restrictions now in force upon imports of wheat.

[7]December 18, 1933.

To watch over the working and application of the wheat agreement, a Wheat Advisory Committee, located in London, is established.

V. The Position of Canada

The significance of the wheat agreement for Canada is now being widely debated and undoubtedly will become the subject of political controversy. This discussion revolves around three aspects of the problem: (1) the efficacy of the agreement as a means of reducing the Canadian carry-over; (2) the workability of the agreement in so far as it seems to call for reductions of the acreage devoted to wheat in Western Canada or elsewhere; (3) the relative advantages or disadvantages which accrue to each of the signatory wheat-exporting countries. An analysis of these aspects of the agreement is beyond the scope of this paper.

There can be little doubt that in so far as the wheat agreement promises, temporarily at least, to bring some order into the competitive scramble for a diminished market in Europe, it should have results of value, but, broadly speaking, the really significant fact to mark has been the inability of the oversea wheat-exporting countries to secure any commitments from the European wheat-importing countries involving a positive decrease in their production of wheat. The undertaking of these countries to moderate their restrictions upon imports is limited by the statement that this concession is not inconsistent with maintaining the home market for domestic wheat grown on the area at present under cultivation. The financial burden entailed by supporting uneconomical production of wheat may force certain European countries to relax their efforts to produce wheat, but this is not within the terms of the agreement.

The unhealthy stimulation of European wheat-production is a result partly of attempts in the past by the oversea producers to maintain a high price on the wheat exported, but especially of intensified nationalism and the fear of war. Barring short crops in Europe as a result of unfavourable seasons, until the turgid tide of nationalism begins to recede and the fear of war in Europe abates, the oversea wheat-exporting countries will find it difficult to bring wheat-exports to the high level previously achieved. It is significant that, quite apart from the wheat agreement, Broomhall's estimate for Canadian export shipments for the present crop-year is placed at 193 million bushels.

A continued export trade in wheat by Canada amounting on the average to 200 million bushels per year would still leave this commodity one of her most important articles of export. In so far as it would imply a reduction in wheat acreage in Western Canada it should accelerate the movement now observable in certain areas in the West, particularly in Manitoba, to turn to other forms of agriculture. How to adjust a reduction in wheat acreage in Western Canada so that this reduction would occur in those areas least suited to the production of wheat calls for a further application of the principles of economic planning and of state control.

— REVIEWS —

MORE WAR MEMORIES*

ALFRED ZIMMERN

OF the works which form the subject of this article, the first two emanate from the same publishing house and are apparently intended to supplement one another. They do, but not in the manner which appears to have been anticipated.

Mr. Lloyd George's *War Memoirs*, which have so far only been carried down to his accession to the Premiership in December, 1916, embody his personal recollections, written down in recent months. Lord Riddell's book, on the other hand, consists of extracts from a diary kept at the time. The entries are fairly continuous, but we are told in the preface that a certain number of passages have been cut out, presumably in deference to the Official Secrets Act.

Thus we have in Mr. Lloyd George's volume the record of what it pleases him to remember, or rather to set down, after a lapse of nearly twenty years, whereas Lord Riddell catches Mr. Lloyd George on the wing and gives us the colour and atmosphere of his circle during the war years.

Lord Riddell—at that time, Sir George Riddell—is a man who has risen to power and wealth in the newspaper world. His best-known publication is a Sunday newspaper called the *News of the World* which provides police-

**War Memoirs of David Lloyd George*, vols. I and II, Ivor Nicholson and Watson (Ryerson Press).

Lord Riddell's War Diary, Ivor Nicholson and Watson (Macmillans in Canada).

The Life of Herbert Henry Asquith, Lord Oxford and Asquith, by J. A. Spender and Cyril Asquith, vols. I and II, Hutchinson and Co.

court and other news for the very large public which likes to use its Sunday leisure for reading of that type. During the war Lord Riddell was the recognized link between the government and the press, having been chosen by his colleagues in the London press as their representative on a press committee for naval and military matters set up in 1912. He had, however, established specially close personal relations with Mr. Lloyd George. His diary indicates that he had built for his statesman-friend the country house at Walton Heath which the latter occupied during the war, and that he also later rented another house in Sussex in order to provide him with a convenient retreat. The record shows that Lord Riddell was in the closest contact with Mr. Lloyd George throughout the war-period. The entries are jotted down in telegraphic fashion, frequently giving the substance of conversations in dialogue form. They constitute an invaluable first-hand historical record. On the whole, the writer avoids general reflections, though there is an occasional comment revealing the shrewd weather-beaten man of affairs. One of these (May 27, 1916) betrays the fact that, close though the two men were to one another, the confidence between them was not absolute: "L. G. never tells me about his meetings with Northcliffe, but I am sure they are in daily contact."

The publishers' announcement tells us that the interest of the Riddell diary is in its picture of Mr. Lloyd George "vital, buoyant, incredibly dynamic . . . the man of imagination who saw dangers most clearly and was the least dismayed." The ordinary reader, particularly if he is able to remember the war-period, is not likely to have this reaction to its pages. Rather will he be surprised and even, perhaps, shocked at the pettiness, the triviality, the self-centred egotism which continually obtrude them-

selves. No doubt high politics must always be largely concerned with the play of personality, even in war-time. Nevertheless, the atmosphere of Walton Heath, in which Welsh hymn-singing is interspersed between conversations on Mr. Lloyd George's oratorical models, his post-war political prospects, and his plans for buying up the *Daily Chronicle*, is not edifying at this distance of time.

One historical point of considerable interest emerges from these pages. It concerns the genesis of the election of December, 1918, the cause of so much trouble to Europe and mankind. It appears that Mr. Lloyd George's original intention was to conduct a war-time election and to use it to crush his opponents in the Liberal party. The first mention of the election is on June 17, 1918: "L. G. thinks that before long there must be a General Election. We must have a Parliament which represents the views of the people." In succeeding entries the subject is referred to a number of times until we read in August (day not stated): "Much talk about a General Election. L. G. is strongly in favour of an appeal to the country in November. . . The issue at the election will really be who is to run the war. Is it to be L. G., Bonar Law and their associates, or Asquith, M'Kenna, Runciman and others who act with them?" On July 29, we read: "We talked much of the forthcoming election. L. G. is now full of it and palpitating with energetic enthusiasm. His vitality is wonderful. He is like a skilful prize-fighter in the ring. He is all over the arena, defending here and attacking there." Talk about a war-time election continues all through August and September. On Friday, September 27, immediately before the Bulgarian armistice, we read: "After dinner, L. G., A. J. B. and Bonar Law retired for a Conference which lasted until 11.30, the subjects being, so I believe, the

proposal for a General Election and the Bulgarian peace proposals. I asked L. G. whether there was to be an election. His answer was not definite. In effect he said, 'Yes, unless peace negotiations alter the position.' " By this time the reports from the Central Empires were making clear the imminence of a break-down. But "the man of imagination" was still thinking in terms of a protracted war. On September 28, he talks of using the Bulgars "to attack the Turks," presumably in a new campaign, while four days earlier he is thinking of stopping strikes by putting strikers into the Army, "as they stand in the way of the prosecution of the War."

However, when a few days later the German request to President Wilson at length compels Mr. Lloyd George to face the responsibilities arising out of the close of the war, he does his best to make up for lost time. The record of the last few weeks of the war throws a good deal of light on subsequent events at the Peace Conference. "Oct. 12 . . . L. G. sat reading Foreign Office papers, occasionally reading extracts aloud and making comments. For example: 'The Germans are in a serious condition internally. Revolution is imminent if no peace is possible. They have no raw materials.' " Henceforward the diary is full of shrill outcries against President Wilson and the Fourteen Points. "Oct. 13 . . . Much talk with L. G. and Reading regarding Wilson's first Peace Note. We walked to the top of Wolstenbury Hill, L. G. declaiming all the time against Wilson's action in replying without consultation with the Allies, and also in regard to the terms of the Note . . . 'Wilson has put us in the cart and he will have to get us out . . . The time is coming when we shall have to speak out. We have borne the burden and heat of the day and we are entitled to be consulted. What do the Fourteen Points mean? They

are very nebulous.'" As late as October 20, Mr. Lloyd George "thinks the Germans will fight hard when they see the Armistice terms." On October 27, "on the road to Walton Heath, L. G. asked me what I thought were the chances of peace. I said 'A slight shade of odds in favour of an armistice before Christmas.' L. G. 'That is my opinion.'" Thus there would still have been time for a war-time election, and, in fact, on October 30, the diary notes that "there has been much discussion about an advertising campaign by the Election Committee."

The ex-Premier's own volumes are exactly what might have been expected from him—a vividly written record of those episodes of his war-activity which he would like to have remembered, presented with the studied simplicity, interspersed with subtle touches of malice, in which he is a past master. The only thing that is surprising is that, with all the help which he must have had at hand, he has not been more careful in mending his fences. Was it, for instance, scrupulousness or *naïveté* which led him to reprint *in toto* his first excursion into amateur strategy on January 1, 1915, recommending a landing on the Dalmatian coast where "the population is predominantly Italian" and foreseeing an "eternal stalemate" in the contest between economic resources because of the "enormous" mineral wealth of Germany?

The student who knows how to read between the lines will find these volumes of great interest, both in what they recount and in what they omit. The choice of subject-matter is almost a programme in itself. A great deal of space is devoted to the controversy between the "Easterners" and the "Westerners," which, at this stage, after the publication of Sir William Robertson's book, it would have been better to have left alone. As a contribution to history, undoubtedly the best chapters are those dealing

with the Ministry of Munitions. Here Mr. Lloyd George's initiative and resourcefulness are seen at their best and the account is full of interesting, well-documented detail.

The transition from Mr. Lloyd George to the two volumes consecrated to Mr. Asquith's memory by his son and his old friend, Mr. J. A. Spender of the *Westminster Gazette*, is, to use no stronger word, incongruous. Here all is measure, self-control, and reserve. Mr. Asquith disliked the idea of a biography: but his place in British history is too great for his wish to have been literally respected. The authors have, however, done their best to adhere to it in the spirit. There is only one short chapter (vol. I, pp. 205-27) dealing with his private life: it is just enough to enable the reader to understand his habit of mind and method of work and to dispel rumours that used to be current about his indolence or his coldness. For the rest, the book takes us through the various stages of his public career with a clarity, a conciseness, and a moderation of statement such as its central figure would have approved. There is just enough documentation to illustrate or confirm important points, such, for instance, as the communications with the King during the crisis of the Parliament Bill. That crisis, indeed, stands out as the central point in Asquith's career. His handling of it, as the record shows, was superb—a combination of patience, determination, and, when the moment required it, inflexible firmness. He was one of the greatest of our constitutional statesmen.

Was he equally great as a war-time Prime Minister? On this history has still her verdict to pronounce in the light of all the evidence; but no one can read the record of the fall of the Liberal ministry in May, 1915, and of the first Coalition in December, 1916, without a sense of

humiliation. Lord French's intervention behind the back of the Prime Minister will remain a permanent blot on his record. As to the second crisis, the story with the parts of the main actors, including Lord Beaverbrook, is now familiar, and judgment will be passed on them in the light of the verdict ultimately formed as to the conduct of the war, including the Nivelle offensive. On this Mr. Lloyd George's third volume must be awaited to set beside Sir William Robertson's and other records. One thing is clear: Mr. Asquith trusted the soldiers and the soldiers (other than French) trusted him.

On the last years of Asquith's life, the best commentary is the sheet of notepaper in Asquith's handwriting on which we read:

> And more true joy Marcellus exiled feels
> Than Caesar with a Senate at his heels.

He retained his dignity, his composure, and his reserve to the last. But that he was a man without feelings is belied by the very effort which his biographers have made not to betray them. They burn their way through their armour of Asquithian reserve. "This was the noblest Roman of them all."

THE DEAN AND THE ASTRONOMERS*

G. S. Brett

The Warburton Lectures, which this book is said to contain, are given in Lincoln's Inn Chapel, and the prescribed subjects are "Old Testament prophecy and the errors of the Church of Rome." Dean Inge agreed to give the lectures on condition that he might choose

*God and the Astronomers, by W. R. Inge, Longmans, Green and Company.

his subject without regard to the trust deed; in excuse he hints darkly at the arbitrary proceedings of the Gifford lecturers who have established a similar freedom by consistent transgression. In both cases we are forcibly reminded that thought and interest no longer run in the grooves which made obvious to the divines of the eighteenth century the possibility of reconciling God and Nature, religion and science. Old axioms have become postulates; old truths have become obstructions; only here and there do we catch glimpses of the old controversies, and even then the panoply of war seems about as modern and efficient as a buckler and a breastplate in the crisis of a gas attack.

Things have changed, undoubtedly. But whether the change is more apparent than real, whether we have given up the old words without giving up the old ideas,—this is virtually the subject of the book. The Dean can speak for himself: "My subject in this book is cosmology," he says, "and I have approached it from the side of the phenomenal world and the concepts of science, based ultimately on the observation of phenomena. But I have insisted that the absolute values, and the mystical experience which is the core of religion, are among the facts which philosophy, even a philosophy of science, must take into account." This is a plain and honest statement; it has all the candour and firm assurance which we have come to associate with the Dean's piety and scholarship. But if the philosopher prides himself too much on his high calling, he may be reminded that "philosophy is little more than the theoretical interpretation" of religion. We note that the Dean has "insisted," which is more obviously a statement about the author's method than a proof of his thesis. Also, an uncharitable critic might say that

mystical experience has been taken into account more than once, and the result has been an additional chapter on the pathology of the human mind. This is not a result which we should approve, but the point to be noticed is that the Dean has an interesting way of making tacit assumptions at critical moments. A good example occurs in the discussion of Time: "If it is asked how we are aware of non-spatial and non-temporal value, the answer is that we perceive them and know them with as much right and as much certainty as we perceive and know the things of sense." These are brave words; but what we really wanted to know was whether we, who perceive these values, are also in any degree non-spatial and non-temporal. For, if not, the words are merely high-sounding adjectives attached to certain perceptions as transitory as all the other activities of man.

This criticism would probably not strike our author as very significant. To make the point clearer we must indicate the general philosophy embodied in this work. God and the astronomers stand respectively for two aspects of human experience. The astronomers, as here meant, are chiefly important because they are driven by scientific necessity to affirm the second law of thermodynamics which involves the general principle of entropy. For the benefit of those who do not profess a knowledge of these matters, the point of the argument is that science requires us to affirm that when work is done some power is expended which cannot be recovered; therefore, in plain language, the world is running down, and it is only a matter of time until it finally becomes cold and inert; and then all our little systems will have had their day. This is an uncomfortable prospect and those who have the misfortune to hear of it stand in

need of consolation. What can be done? One course is to imitate the ostrich, put our heads in the sandheaps of prosperity and refuse to be agitated. This is not the Dean's way; he will not even accept the olive-branch of the more lenient scientists who suggest that, after all, natural laws are the work of the mind, only a form of statistics, no more definite than a batting average in cricket, good as probabilities but uncertain enough to be ignored when inconvenient. The Dean is a realist; he does not like those engaging frailties which have endeared Eddington to so many would-be thinkers; he fears that Heisenberg's principle of indeterminacy may mean very little as the last defence of moral freedom, or even prove to mean nothing at all. In all this the Dean is much to be admired: he asks no mercy and he needs none, for he puts his trust in his own axe. The first blow is delivered at all mathematical physicists by the criticism that mathematics deals with a world "in which Time has no place," while entropy involves real time. If the opponent is likely to survive this shock, he will be despatched with the argument about the Whole, namely that "for the whole Time has no significance."

These are good arguments within certain limits. It has been a commonplace in the philosophy of science during the past fifty years that mathematics is a form of logic and shares with logic the defect of having no control over existence; to say that events *obey* a law of nature is merely to say that the prediction was successful. But if our forefathers were too confident about the finality of their scientific dogmas, the present generation is inclined to overlook the fact that our hopes as well as our fears rest on faith in a rational order. The Dean has not forgotten this: he believes in an "ordered harmony or system of cosmic life," an intelligible world,

a pure desire to know, and real truth as its goal. Consequently Pragmatism is not treated seriously and there are no passages in the book more outspoken or temperamental than the pages which deal with this "American" philosophy. "The popularity of this philosophy with Americans is due partly to their experience of commercial methods" and the essence of the matter is that "the Americans are so much used to bluff each other that they think they can bluff nature and God." Lest this should appear to be an isolated prejudice, we hasten to add that Dean Inge is equally emphatic in his condemnation of Bergson's "fantastic mysticism" and Samuel Alexander's views about space, time, and deity. He would grant some merits to Bergson (whose real position he does not adequately state), but he is without mercy toward those who find in the new science and the new politics feeble substitutes for theism and traditional Christianity. Having quoted some characteristic views about the democratic conception of God, which is now supposed to have overcome the aristocratic view and made God responsible to man, the Dean classes them all as "profane nonsense" and thinks that "a hypothetical unseen President of a republic" ought not to be called God even if he is retained as the symbol of a degenerate religion.

It is time to take stock of the arguments. The second lecture deals with mathematical physics and entropy, as we have already stated. In the next lecture the idea of time is elaborately discussed, and this leads to the fourth lecture on God in history, which is really an essay on the meaning of history and the idea of progress. So far the main achievement has been a critical review of recent movements in science and philosophy, guided more or less obviously by certain principles

definable as the characteristics of Christian theism. The climax comes in the fifth lecture, which deals with the world of values. It is not difficult to see that Dean Inge has been deeply influenced by the recent philosophy of values, nor is it unreasonable that he should find it at least very helpful. His realism, as we have called it, is the realism of Plato and of Plotinus, whom he openly calls "my master;" it is a realism which might as well be called idealism, for the ultimate reality is found in what men have always called their "ideals," in Truth, Goodness, and Beauty, which are the core of the great tradition in philosophy and have again emerged as the distinctive marks of philosophical discussion. It is not easy to formulate the doctrine of this book, unless we are content to take it as a confession of faith based on acute reasoning and tempered by wide knowledge. The argument is essentially religious and ethical, but it is not narrowly orthodox. The three great values are "a very full revelation of the nature of God," which implies that the revelation was in part given to Plato; religion is so far independent that "the fate of the material universe is not a vital question for religion," but we must not on that account ignore physical science or indulge in the extravagances of ascetic renunciation; there is no proof that the cosmos progresses or that history reveals the purposes of God, but in a world full of real evils and deplorable relapses such as famine, pestilence, and war, we have good reason to hope, and even better reason to struggle, for the realization of the values which we have at least seen in our visions. In brief, this is the middle way, the *via media* of the great tradition, which has always steered between the extremes of materialism and spiritualism, and has survived in the strength of its sanity when time has destroyed the force of unbalanced exaggerations.

It is hardly necessary to add that this book deserves to be read by all who are capable of appreciating its extensive learning and the excellence of its style. The reading is not always easy, because the subjects require careful attention, and philosophy, as William James said, is a more than usually obstinate way of thinking. But it ranges widely over the questions which are considered most significant in modern thought and it contains some characteristic epigrams, such as the remark, "a popular religion is a superstition which has enslaved a philosophy," or the acute comment on the difference between space and time that "most of us wish to be immortal, but no one wishes to be ubiquitous." If we cannot say without qualification that Dean Inge has wholly reconciled the creed of the astronomers with the aspirations of the religious consciousness, it is certain that he has kept the discussion on a high plane of learning and wisdom, justifying his belief that St. Paul might have said to this generation, "Now abideth Truth, Beauty, Love, these three, but the greatest of these is Love." To appreciate this paraphrase the astronomers may need to look up the original!

THE ART OF THE NOVEL*

JOSEPH WARREN BEACH

Mr. Pelham Edgar is singularly well equipped to write on the art of the novel. To begin with, there is no mistaking the genuineness of his interest in the novel as an aesthetic product, and his concern with every consideration, broad or narrow, that has bearing on the way novels are fashioned to get their effects. There is a

*_The Art of the Novel_, by Pelham Edgar, Macmillans in Canada.

quiet fervour in his tone that shows he means business, and at the same time an openness of mind that keeps him from pronouncing judgment crudely or prematurely, and declaring that such and such is the one right way of doing things for all time. His is a faith without fanaticism, an independence without pugnacity. (For these high virtues, it may be, the vulgar will pronounce him a Laodicean, a sitter astride of fences, and—a college professor!) He has the catholicity and imagination requisite for anyone who is to review the English novel from John Lyly to Virginia Woolf and to interpret the art of Fielding and Sterne, Eliot and Conrad, Dorothy Richardson and Aldous Huxley. He has spent his life with the English classics, and formed his taste upon them. But while they have given him standards, they have not given him infallible rules of judgment nor made him prone to excommunication for heresy. History has taught him that literature is a growing organism, and that whoever would be a critic of literature must keep on growing along with his subject. Mr. Edgar has, clearly, his own preferences in literary form and tone, but he can generally stretch his mind, without too great distress, to the appreciation of tones and forms not congenial to his conditioned taste. He is particularly happy in his comments on style, and the book is strewn with penetrating *obiter dicta* like this upon Norman Douglas and Aldous Huxley: "In the notation of character there is perhaps a sharper accent [in Douglas], for he is not quite so much at the mercy of his own brilliance as the younger writer." Or this on Hemingway and Dos Passos: "Dos Passos has nothing of this slovenly continuousness [of Hemingway's] in his writing. But there is a staccato aspect of Hemingway's style that he can reproduce with an even more biting realistic effect."

Mr. Edgar's chief aim is "to present a systematic study of the structural evolution of the English novel." In the chapter on "Essentials" he offers a most acute and illuminating analysis of the chief points of structural technique involved,—matters like the relation of design to plot, the handling of dialogue, description, point of view. "In what follows, great books and authors from 1700 to the present day are interpreted with a view to ascertaining what has been the main drift of fiction, and for the purpose of estimating current tendencies." This is, of course, a programme beset with prodigious difficulties. The main temptation of a cultivated and scholarly critic would naturally be to overlook "the main drift" at times while pursuing the special charm and varied merit of favourite authors. Another temptation would be to comment on matters of great interest in literary history which have, nevertheless, a dubious or merely tangential bearing on "the structural evolution" of the novel. To both of these temptations Mr. Edgar has at times succumbed. He has been tempted to inquire into the legend that Fielding was an immoral character, into the reasons why women have made so poor a record in intellectual pursuits, into the bias which readers have against the hundred-per-cent American. And that is just so much time lost to consideration of the artistry of Fielding, Dorothy Richardson, and Sinclair Lewis. He has been tempted to give lengthy treatment to authors—like Hawthorne, Melville, and the Brontës—who have, upon his showing, little light to throw on the structural evolution of the novel.

One understands perfectly the considerations which lured Mr. Edgar down these pleasant byways. He wished to be comprehensive, to leave out as few as possible of the major names in fiction. He wished to be historical

as well as analytical. He would write like a gentleman, with spaciousness and leisure. He would not keep his reader's nose perpetually on the grindstone of narrowly technical problems. . . . But he knows well enough that this is no grindstone. It is what interests him most in the study of the novel. And the price he must pay for being comprehensive is the scanting of his subject at many a point where he would have liked to round it off. He has not space to mark adequately the consecutiveness and direction of his thought, and to keep the reader constantly aware of the main drift of his discourse. There are many writers capable of interpreting the quality of *Moby Dick* and *Wuthering Heights*. There are very few competent, like Pelham Edgar, to trace the evolution of the novel-form through Austen and Dickens, to James and Conrad, to Joyce and Faulkner. I wish he had carried out his programme more resolutely, had given freer scope to his distinguished gift for reasoned aesthetic criticism.

Mr. Edgar's method has, for all that, its obvious and clear advantages. It makes possible a swifter movement and a lighter touch, since he need not bear down too hard on any one topic. It enables him to vary his attack with each new author and to deal in each case with the special points of technique which most repay study. The book abounds with acute analyses of particular books, each one yielding its own artistic moral. Another admirable feature is the quotation of priceless critical utterances and declarations of intention by the authors themselves; such as those from Scott and Charlotte Brontë, from Conrad and Edith Wharton, from Flaubert and George Sand, Willa Cather and Virginia Woolf. Our final word must be one of simple gratitude for this abundance—unqualified recognition of the urbanity, authority, and challenging suggestiveness of this work.